DOCUMENT RESUME

**ED 160 051** IR 006 062

| | |
|---|---|
| TITLE | Analysis of Service and Development of Performance Measurements for State of Hawaii Libraries. Volume V: Performance Measurements System Manual for State of Hawaii Libraries. |
| INSTITUTION | Survey and Marketing Services, Inc., Honolulu, Hawaii. |
| SPONS AGENCY | Hawaii State Library System, Honolulu. |
| PUB DATE | 2 Dec 77 |
| NOTE | 149p.; For related documents, see IR 006 058-061 |
| EDRS PRICE | MF-$0.83 HC-$7.35 Plus Postage. |
| DESCRIPTORS | *Administrator Guides; *Evaluation Methods; Library Administration; Library Circulation; Library Facilities; Library Materials; *Library Research; *Manuals; Operations Research; *Public Libraries; State Libraries; Use Studies |
| IDENTIFIERS | *Hawaii |

ABSTRACT

The instructions provided for carrying out data collection and analysis procedures for library materials, services, and users include sampling techniques. Evaluation methodology is described for determining the probability of a user finding and obtaining a recently published book in a particular library, title and periodical availability, how a library's reference collection compares with a standard list, characteristics of a library's users, in-library circulation, circulation distribution, the ability of a library to satisfy interloan requests, types and numbers of information requests received, and public service staff activities. (CMV)

***********************************************************************
*     Reproductions supplied by EDRS are the best that can be made     *
*                    from the original document.                       *
***********************************************************************

ED160051

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

# ANALYSIS OF SERVICE AND DEVELOPMENT OF PERFORMANCE MEASUREMENTS FOR STATE OF HAWAII LIBRARIES

## Volume V

## Performance Measurements System Manual for State of Hawaii Libraries

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Masae Gotanda

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

IR006062

*Other Volumes In This Study Include:*

Volume I: Summary Report.
Volume II: A Survey of Residents in Relation to Public Library Use.
Volume III: Results of the Library Staff and Government Agency Surveys.
Volume IV: Results of Measurements Conducted in Selected Public Libraries in Hawaii.

SURVEY & MARKETING SERVICES, INC.
SUITE 517 · 184 SOUTH HOTEL ST. · HONOLULU, HI. 96813 PHONE 537-3356 · 537-3357

December 2, 1977

Mr. Charles G. Clark
Superintendent of Education
Department of Education
Queen Liliuokalani Building
1390 Miller Street
Honolulu, Hawaii 96813

Dear Mr. Clark:

We are pleased to present AN ANALYSIS OF SERVICE AND DEVELOPMENT OF PERFORMANCE MEASUREMENTS FOR STATE OF HAWAII LIBRARIES. Our five-volume study presents findings on the library needs of Hawaii's residents, current library performance, recommendations for improving operations and services, a system for continuous monitoring of library performance, and a systems manual which details how performance information is to be gathered and analyzed.

AN ANALYSIS OF SERVICE AND DEVELOPMENT OF PERFORMANCE MEASUREMENTS FOR STATE OF HAWAII LIBRARIES has been designed to be a working tool to serve the Department and the State library system. We have developed a versatile and comprehensive set of performance measurements which when implemented will place Hawaii in the forefront of the nation's library systems.

Our work on this study has been a rewarding experience for our project team, and we would like to thank you for the assistance and support of the Department of Education in this effort.

Sincerely,

Lee A. Weigle

Lee A. Weigle
Executive Director

# ACKNOWLEDGEMENTS

During the course of this study, literally dozens of people have given us assistance at one point or another. We would like to take this opportunity to express our thanks to all of them.

We feel particularly indebted to Masae Gotanda, Head of Research and Evaluation for the Hawaii State library system who was the tireless project manager responsible for the overall direction that brought this project to completion. We would also like to thank May C. Chun, former State Librarian, whose professional support and personal graciousness made our job a pleasure as well as a challenge.

In addition, we would like to acknowledge other key personnel in the library system who met with us frequently and provided us with their review and suggestions. They include Ruth Itamura, State Librarian; Oi Yung Chow, Librarian, Hawaii State Library; Seichi Toda, Director, Administrative Services Section; and Edna Tsusaki, Librarian, East Oahu Library District. Dr. Miles M. Jackson of the University of Hawaii Graduate School of Library Studies lent us his valuable experience and expertise throughout the course of the project. A special note of gratitude is also due Ernest R. De Prospo, Professor, Graduate School of Library Science, Rutgers University, New Brunswick, New Jersey for giving us his cooperation, consultation and encouragement throughout the study and especially during his visit to Hawaii.

# TABLE OF CONTENTS

GENERAL INTRODUCTION . . . . . . . . . . . . . . . . . . . . . . . . . i

SECTION 1: GENERAL INSTRUCTIONS . . . . . . . . . . . . . . . . . . . . 1

SECTION 2: BOOK PUBLISHING RECORD PROBABILITY SAMPLE . . . . . . . . . . 29

SECTION 3: TITLE AVAILABILITY SAMPLE . . . . . . . . . . . . . . . . . 41

SECTION 4: PERIODICAL AVAILABILITY SAMPLE . . . . . . . . . . . . . . . 53

SECTION 5: REFERENCE TITLE OWNERSHIP SAMPLE . . . . . . . . . . . . . . 67

SECTION 6: LIBRARY USER SAMPLE. . . . . . . . . . . . . . . . . . . . . 77

SECTION 7: IN-LIBRARY CIRCULATION SAMPLE . . . . . . . . . . . . . . . 87

SECTION 8: CIRCULATION DISTRIBUTION SAMPLE. . . . . . . . . . . . . . . 97

SECTION 9: INTERLOAN REQUEST SAMPLE . . . . . . . . . . . . . . . . . . 109

SECTION 10: INFORMATION REQUESTS SAMPLE . . . . . . . . . . . . . . . . 117

SECTION 11: LIBRARY STAFF WORK SAMPLE . . . . . . . . . . . . . . . . . 129

## GENERAL INTRODUCTION

In the fall of 1976, the library system of the State of Hawaii commissioned a study to explore the ways in which the performance of Hawaii public libraries might be measured and assessed in relation to community needs, available resources, appropriate standards, and library objectives. Generally the study was to:

- Describe and assess the library needs of residents and relevant institutions;
- Analyze the present reporting system, and develop appropriate measures of public library performance;
- Conduct tests of proposed library measurements in five selected Hawaii public libraries;
- Develop a system for measuring the performance of State of Hawaii public libraries in relation to library system objectives and standards, and specify procedures for collecting and analyzing performance data.

The firms of Survey and Marketing Services, Inc. and its subcontractor, Henry A. Alexander and Company, Inc., were selected for the study. Dr. Miles M. Jackson of the University of Hawaii Graduate School of Library Studies was retained as a consultant by the contractor. The Hawaii State library system formed a project management team to work with the consultants. The project management team included the State Librarian, the Director of Public Library Services, selected section heads and representatives from the contractors. The head of Research and Evaluation Services for the library system served as project manager. The project team met periodically during the design and execution phases of the study to review progress and provide feedback.

6

The study involved four separate data and information collection tasks: A survey of the adult residential population in the State; a survey of public library personnel; a survey of agencies and institutions served by the public library system; and the measurement of materials, facilities use, and staff activities in selected Hawaii public libraries.

User/Nonuser Survey:

The survey of adult residents in the State was conducted November 19 through December 9, 1976. A total of 1,000 adults were interviewed by telephone throughout the State. The following numbers were interviewed on each island in the State in proportion to that island's share of the State population: Oahu, 815; Hawaii, 86; Kauai, 37; Maui, 54; Molokai, 6; and Lanai, 2. Residential telephone numbers for the sample were obtained through a Survey and Marketing Services' computer program which randomly generates telephone numbers. The survey covered the following topics: Use of the public library; patterns of library use; reasons for non-use; characteristics of library users and nonusers; attitudes toward the library; and demand for library materials and services.

Library Staff Survey:

The survey of State public library personnel involved all employees except janitorial or maintenance workers. A total of 425 questionnaires were distributed through the library system, and 297 (70%) were returned to Survey and Marketing Services for data processing and analysis. Topics covered included opinions about library system performance; materials, service and program needs of the library; work conditions and training needs; and problems facing the library system.

Government Agency Survey:

Six government agencies and institutions with actual and potential needs for library system services were selected for study. In-depth, semi-structured interviews were conducted with the management of each institution. The framework for these interviews focused attention on the role of the State library system in relation to institutional needs.

Library Measurements:

Measurements of materials and library use were carried out in five selected public libraries: Hawaii State Library, Kaimuki Regional Library, Hilo Regional Library, Liliha Library and Kahuku Community/School Library. In addition, an observation study of staff work was conducted in the Hawaii State Library. The measures and data collection procedures used, with the exception of the staff work observation study, were based on the performance measurements manual developed by Ellen Altman and others.[1] The purposes of the library measurements phase of the study included testing and modification of measures to ensure their applicability to Hawaii public libraries, and development of findings about Hawaii libraries that could be used for recommending changes in the library system.

This manual provides instructions for carrying out the data collection and analysis procedures developed as a part of the recommended performance measurement system. Other reports completed as part of this study provide information about study findings and conclusions and the methodologies used. Volume I: Summary Report includes a general summary of the findings of the library study and major recommendations from the study, as well as a description of the performance measurement system developed for Hawaii libraries. Volume II: A Survey of Residents in Relation to Public Library Use, Volume III: Results of the Library Staff and Government Agency Surveys, and Volume IV: Results of Measurements Conducted in Selected Public Libraries in Hawaii provide details of the findings and methodologies for the respective surveys and measurements. Volume IV also provides detailed recommendations for the improvement of library system materials, operations, and staffing.

---

[1] Ellen Altman, Ernest R. De Prospo, Philip M. Clark, and Ellen Conner Clark. A Date Gathering and Instructional Manual for Performance Measures in Public Libraries. Celadon Press: Chicago, 1976.

# SECTION 1:
# GENERAL INSTRUCTIONS

## INTRODUCTION

This is an instructional manual that tells you and your library staff how to help gather and analyze selected information about your library's materials, services and users. This information will have two uses.

1. It will help you to determine how well you are meeting performance objectives established for your library.
2. It will give you "facts" about your library that should enable you to make your materials and services more efficient and more relevant to user needs.

The information you gather through the procedures outlined in this manual will not tell you everything you need to know about your library's performance and operations. For instance, areas not covered include the audio-visual equipment and services you have available, any programs and activities you may be sponsoring for children and other members of your community, and any consulting services you may be providing to other libraries to help them improve their materials or services. These aspects of your library are important; however, it was not considered feasible to include measures of them in this data collection system at this time. Such measures should be developed and included in data gathering efforts in the future. Also, the information in this manual focuses on present services to satisfy the needs of current library users. Information about the needs and interests of residents not currently served by the library, and estimates of the incidence of library use in the population, require a survey of the general population. We recommend that such a survey be conducted about once every four years.

For the most part, the measurements, procedures and forms contained in this manual were adopted from the manual developed by Ernest De Prospo and his associates.[1] Appropriate modifications were made to meet the particular measurement needs and practical requirements of libraries in the Hawaii State system.

## DATA COLLECTION TASKS

The separate data gathering tasks that this manual calls for are summarized in the chart on the next page. It presents the following information for each separate data collection task: How often the data collection is to occur; the method or methods through which results will be tabulated from data that have been collected; and how often the results of the data collection will be summarized and included in a formal library measurements report.

---

[1] Ellen Altman, Ernest R. De Prospo, Philip M. Clark, and Ellen Conner Clark. A Data Gathering and Instructional Manual for Performance Measures in Public Libraries. Celadon Press: Chicago, 1976.

## DESCRIPTION OF DATA COLLECTION TASKS IN THE LIBRARIES MEASUREMENTS MANUAL

| Data Collection Task: | Description: | Location in this Manual: | Frequency of Measurement: | Method of Tabulation: | Frequency of Reporting: |
|---|---|---|---|---|---|
| Book Publishing Record probability sample | a sample of recently published books to compare with your collection to assess its adequacy | Section 2 | once a year | hand tabulation by library staff | once a year |
| Title availability sample | a sample of titles from your shelflist to describe the characteristics and availability of your collection | Section 3 | once a year | tabulation by computer through Office of Library Services | once a year |
| Periodical availability sample | a sample of current periodicals to compare with your collection to assess its adequacy | Section 4 | once a year | hand tabulation by library staff | once a year |
| Reference title ownership sample | a sample from a standard list of reference titles to compare with your reference collection to assess its adequacy | Section 5 | once a year | hand tabulation by library staff | once a year |
| Library user sample | a sample of walk-in users of your library to describe their characteristics and satisfaction | Section 6 | twice a year | tabulation by computer through Office of Library Services | once a year (aggregation of the two measurements) |
| In-library circulation sample | a sample of materials used by patrons in your library to determine types of materials in use | Section 7 | twice a year | hand tabulation by library staff | once a year (aggregation of the two measurements) |
| Circulation distribution sample | a sample of items borrowed from your library to describe the types of books and materials in circulation | Section 8 | twice a year | hand tabulation by library staff and tabulation by computer through Office of Library Services | once a year (aggregation of the two measurements) |
| Interloan request sample | a sample of interloan requests made by your library's patrons to determine success in filling requests and types of books requested | Section 9 | twice a year | tabulation by computer through Office of Library Services | once a year (aggregation of the two measurements) |
| Information requests sample | a sample of questions asked your library staff to determine types of questions, sources used to answer and questioners | Section 10 | twice a year | tabulation by computer through Office of Library Services | once a year (aggregation of the two measurements) |
| Library staff work sample* | an observation sample of your staff's work time to determine time spent per work function | Section 11 | once every four years | tabulation by the consultant | once every four years |

*An outside consultant should be used to perform this data collection task.

## Timing

The first four data collection tasks listed in the chart need to be completed only once a year. The period of the year during which each task should be carried out will be coordinated by the Office of the State Librarian.

The next five tasks listed in the chart need to be done at two different times during the year. This is because certain aspects of library use and service (such as the number and types of users or materials borrowed) differ from one part of the year to another. The decision as to timing will be coordinated by the Office of the State Librarian.

The last data collection task, the sample of library staff work, needs to be carried out only once every four years. It will not be directed by staff in your library, although you will be asked to assist and cooperate. An outside consultant should be recruited to design and supervise this data collection effort. Section 11 of this manual outlines the general nature of this task.

## Tabulation

Four of the data collection tasks (the sample of recently-published books, the sample of periodicals, the reference book title sample, and the sample of materials used by patrons) involve relatively simple tabulations, and can be done by your staff or clerical assistants. Forms and procedures for tabulating these samples are provided in this manual.

In the case of four other tasks (the sample of titles from your shelf-list, the sample of walk-in users of your library, the interloan request sample, and the sample of information requests), we recommend that tabulation be done using the Statistical Package for the Social Sciences (SPSS) computer software[2] possessed by the State of Hawaii. Besides making the tabulation for these samples more manageable, processing by computer will also provide for more flexibility in tabulation.[3] In these instances, you will be putting the information you collect onto "coding sheets" provided in this manual. The Office of Library Services will coordinate the keypunching and submission of data for computer processing.

One sample (circulation distribution) will be tabulated by computer, but will also require some tallying by hand. The work sample will be tabulated by the consultant.

---

[2] Norman H. Nie, C. Hadlai Hull, Jean G. Jenkins, Karin Steinbrenner, and Dale H. Bent. Statistical Package for the Social Sciences, Second Edition. New York: McGraw-Hill Book Company, 1975.

[3] First of all, the computer can tabulate the data a number of different ways with minimal additional effort. Secondly, the way in which the results are tallied can be altered if desired with just a few changes in program statements. For example, in the tally of books owned by your library, the categories of "juvenile fiction" and "juvenile non-fiction" could be combined into a "juvenile books" category.

### Reporting

With the exception of the last one listed (the library staff work sample), all the data collection tasks in the chart will produce measurements which will be reported on an annual basis. Results from data collection tasks conducted twice during the year will be aggregated to produce annual measurements. Once a year, the Office of Library Services will issue a Measurements Report for your library. This report will display the tabulated results of data gathered for your library, and will also feature for comparison purposes statistics for libraries at the regional, community, and community-school level. This will provide you with a convenient summary of results for your library, and will allow you to compare your library's performance with results for similar libraries in the State system. The format for the annual Libraries Measurements Report is featured in a later part of this section.

## RESOURCE REQUIREMENTS

### Personnel

It is imperative that you name a Project Coordinator to oversee the data collection process, answer questions and supervise the tabulation of findings. Much of the actual work, however, can be performed by clerks or volunteers.

Collection of the sample of information requests will require staff members to record information while performing their normal jobs. All of the other data gathering tasks can be performed by a clerk, page or volunteer under the supervision of the Project Coordinator. Hand tabulation of results, where required, can usually be performed by a clerk with some assistance from the Project Coordinator.

The sample of walk-in library users will require that you have at least one person stationed at the entrance to your library from opening time until closing time on the days surveyed. The in-library circulation sample of materials and items used by patrons will require that a person tour the building each hour to gather and count materials which patrons have used within the building.

### Supplies

"Master copies" of all the forms you should require to complete the data collection tasks are included within this manual. However, you should always use copies of the forms to do the actual work. You will be using a copy machine to make a sufficient number of duplicates of each form.

The last two-digits of your library's budget code, which will be used on coding sheets for your library, are given on the next page. These numbers are for data processing purposes only, and there is nothing further you will have to know about them or do with them. Their purposes are briefly described on the next page.

In order to carry out the data collection tasks in a proper manner, you will need certain material resources beyond the forms and instructions in this manual. The following list indicates essential items which should be assembled well before data collection takes place.

- access to a copying machine
- a copy of the American Library Association's Reference Books for Small and Medium-Sized Libraries (Reference Books Review Committee, Second Edition, revised: Chicago, 1973) that you can mark up*
- retractable metal ruler
- 3" x 5" index cards
- printed signs (see Sections 6 and 7 of this manual)
- printed user "tickets" (see Section 6 of this manual)
- a Project Director, clerks and/or volunteers

## USE OF THE MEASUREMENTS FOR YOUR LIBRARY

At the end of a year of library service, you will have a number of tabulated measurements with which you can assess you library's performance and analyze some of its materials and activities. A summary of these measurements for the entire year of your library's operations will be contained in a Libraries Measurements Report, which will be prepared for your library by the Office of Library Services. In addition, you will have important "seasonal" measurements of certain aspects of your library's performance and activities to show how patron use and needs may differ from one part of the year to another, and allow you to make appropriate adjustments in staffing or service.

---

*The Hawaii State Library Resource Center will require access to Eugene Paul Sheehy, Guide to Reference Books (Ninth Edition, Chicago: American Library Association, 1976). However, no marks will need to be placed on the pages of Sheehy, Guide to Reference Books, so it can be a library copy.

# BUDGET CODES FOR HAWAII PUBLIC LIBRARIES

## (LAST TWO DIGITS ONLY)

The last two digits of the budget code for your library is to be placed in Columns 23 through 24 of each row of the following coding sheets in this manual: Title Availability Sample: Form 2; Library User Sample: Form 2; Circulation Distribution Sample: Form 3; Interloan Request Sample: Form 2; and Information Requests Sample: Form 2.

This number is for data processing purposes; it will allow the computer to tabulate the results for your library separately.

| Budget Code | Library |
|---|---|
| 01* | Hawaii State Library Resource Center |
| 02* | Hawaii State Library Popular Library |
| 22 | Aiea Library |
| 23 | Aina Haina Library |
| 24 | Ewa Beach Community-School Library |
| 25 | Kahuku Community-School Library |
| 26 | Kailua Library |
| 27 | Kaimuki Regional Library |
| 28 | Kalihi-Palama Library |
| 29 | Liliha Library |
| 30 | McCully-Moiliili Library |
| 31 | Manoa Library |
| 32 | Pearl City Regional Library |
| 33 | Wahiawa Library |
| 34 | Waialua Library |
| 35 | Waianae Library |
| 36 | Waikiki-Kapuhulu Library |
| 37 | Waipahu Library |
| 38 | Kaneohe Regional Library |
| 39 | Hawaii Kai Library |
| 40 | Waimanalo Community-School Library |
| 50 | Wailuku Regional Library |
| 51 | Kahului Library |
| 53 | Lahaina Library |
| 54 | Lanai Community-School Library |
| 55 | Makawao Library |
| 56 | Molokai Library |
| 70 | Hilo Regional Library |
| 71 | Holualoa Library |
| 72 | Honokaa Library |
| 73 | Kohala Library |
| 74 | Kona Library |
| 75 | Pahala Community-School Library |
| 77 | Thelma Parker Memorial Library |
| 80 | Pahoa Community-School Library |
| 81 | Laupahoehoe Community-School Library |
| 82 | Mountain View Community-School Library |
| 83 | Keeau Community-School Library |
| 84 | Naalehu Library |
| 85 | Kailua-Kona Library |
| 90 | Lihue Regional Library |
| 91 | Hanapepe Library |
| 92 | Kapaa Library |
| 93 | Waimea Library |
| 96 | Koloa Community-School Library |
| 97 | Kalaheo Community-School Library |

* These numbers are assigned for the purpose of this manual only.

For the purpose of measuring its performance, the Hawaii State Library is viewed as functioning at two levels--service to technical and professional users (the Resource Center), and service to the general public (the Popular Library).

## Use of the Annual Libraries Measurements Report

A copy of the annual Libraries Measurements Report is provided at the end of this section. It has two sections: "Performance Measures," and "Activities and Materials Measures."

The "Performance Measures" section of the report will contain information about the following aspects of your library's performance:

- user satisfaction with your library's materials
- availability in your library of recently-published books
- the appropriateness of your library's book collection, in light of the types of books you intend to have and the types of books borrowed (wanted) by users
- the recency of your library's book collection, in conjunction with the recency of books borrowed (wanted) by users
- the appropriateness of your library's periodical collection, in light of the types of periodicals you intend to have
- the comprehensiveness of your reference collection
- the appropriateness of your reference collection, in light of the types of reference books you intend to have
- the recency of your reference collection
- the appropriateness of the types of library users you serve, in light of the types of library users you intend to be serving
- user satisfaction with your library's services
- the quantity of interloan service you provide
- the responsiveness of your interloan service overall and by type and recency of book
- the responsiveness of the information and reference service you provide

The "Activities and Materials Measures" section will include additional information useful for management purposes about the following aspects of your library:

- your book collection
- the materials borrowed by users
- materials and items used within your library
- walk-in users of your library
- information requests made within your library

In addition to measurements for your library, the report will also provide information about other libraries within the system for comparison purposes. It will provide the "median" value for each measurement among regional libraries, community libraries and community-school libraries, as well as the range (low to high) of measurements among the libraries within each group.

Some of the questions that you should ask and answer through reference to the performance measurements for your library are the following:

1. How adequate is your library's performance on each measure in light of the relevant performance objective established for your library?

2. Where does the performance of your library fall in relation to the median value and the range or "spread" of measurement results for other libraries of your type? What does this comparison imply in terms of what should be "reasonable" expectations for your library?

3. If there are a number of areas in which your library appears to fall short of its objectives, which areas would you recommend for priority action?

4. What specific quantitative measures of performance would you want to increase through such priority action, and in what amounts?

5. What actions would have to be taken (in terms of resources shifted to, or added to, book purchases or services, etc.) to support the priorities and quantitative increases in performance you would recommend?

Some of the questions it may be useful to ask in connection with measures of activities and materials for your library are the following:

1. What additional information do these measures provide about the materials, services or use of your library?

2. What clues does this information provide about what aspects of materials, service or staffing might help to improve performance in different areas?

3. What priorities for changes in activities, materials, etc. would you recommend in the light of desired priorities for improving performance?

## Use of "Seasonal" Measurements

Because certain of the samples were collected and tabulated at two different times during the year, you will also have information about how your library's circulation, users or activities differed from one part of the year to another. For each period of the year, you will have measurements covering the following aspects of your library:

- user satisfaction with materials*
- materials borrowed by users
- types and recency of books borrowed by users*
- materials and items used within your library
- types of users served by your library*
- timing of library use during the day*
- user satisfaction with services*
- responsiveness of interloan service and types of books requested*
- responsiveness of information and reference service and types of questions and questioners*

*Tabulations will be on computer printout sheets.

Most of these measurements (noted with an asterisk [*] above) will be tabulations on sheets of computer printout sent to you after each measurement period. These tabulations are produced from data that your library submits to the Office of Library Services on coding sheets provided in this manual, and are processed by computer. The computer tabulations will have extensive labeling to make them easy to read and use.

You will already have tallies of the types of materials borrowed by users and the materials and items used within the library, since these will have been tabulated by hand by your library, using forms provided in this manual.

You should use these measurements to ask questions such as the following:

1. What differences in use of materials or services, use of facilities or types of users are there during different seasonal periods of your library's operations?
2. What variations in staffing, staffing assignments, services or hours of operation would you recommend to meet these differences in user needs at different times of the year?

STATE OF HAWAII LIBRARIES MEASUREMENTS REPORT

PERFORMANCE MEASURES

Name of Library:____________________________ Measurements for: ________
year

---

| | | | Regional Libraries | | Community Libraries | | Community-School Libraries | | |
|---|---|---|---|---|---|---|---|---|---|
| Measure | Your Library | | Median | Low-High Range | Median | Low-High Range | Median | Low-High Range | Source |
| User satisfaction with materials | No. | % | % | | % | | % | | |
| Proportion of users expressing satisfaction with library materials: | | | | | | | | | Library user sample |
| Yes | | | | | | | | | |
| No | | | | | | | | | |
| Partially | | | | | | | | | |
| Not determined | | | | | | | | | |
| Availability of recent books | .00 | | .00 | | .00 | | .00 | | |
| Probability of obtaining a book published within the last 5 years | | | | | | | | | BPR probability sample |

Name of Library: ______________________________

| | | | Regional Libraries | | Community Libraries | | Community-School Libraries | | |
|---|---|---|---|---|---|---|---|---|---|
| Measure | Your Library | | Median | Low-High Range | Median | Low-High Range | Median | Low-High Range | Source |
| Appropriateness of book collection | No. | % | % | | % | | % | | |
| Distribution of book collection by class of book: | | | | | | | | | Title availability sample |
| Adult fiction | | | | | | | | | |
| Gen. Works, Phil., Rel. | | | | | | | | | |
| Soc. Sciences, Language | | | | | | | | | |
| Pure Science, Technology | | | | | | | | | |
| The Arts, Literature | | | | | | | | | |
| History, Biography | | | | | | | | | |
| Juvenile fiction | | | | | | | | | |
| Juvenile non-fiction | | | | | | | | | |
| Haw. & Pac., Foreign | | | | | | | | | |
| Not determined | | | | | | | | | |
| Distribution of books circulating by class of book: | | | | | | | | | Circulation distribution sample |
| Adult fiction | | | | | | | | | |
| Gen. Works, Phil., Rel. | | | | | | | | | |
| Soc. Sciences, Languages | | | | | | | | | |
| Pure Science, Technology | | | | | | | | | |
| The Arts, Literature | | | | | | | | | |
| History, Biography | | | | | | | | | |
| Juvenile fiction | | | | | | | | | |
| Juvenile non-fiction | | | | | | | | | |
| Haw. & Pac., Foreign | | | | | | | | | |
| Not determined | | | | | | | | | |

Name of Library: ______________________

| | | --- Regional Libraries --- | | --- Community Libraries --- | | --- Community-School Libraries --- | | |
|---|---|---|---|---|---|---|---|---|
| Measure | Your Library | Median | Low-High Range | Median | Low-High Range | Median | Low-High Range | Source |
| Recency of books | No. % | % | | % | | % | | |
| Recency (published last 5 years) of book collection: | | | | | | | | Title availability sample |
| Recent | | | | | | | | |
| Not recent | | | | | | | | |
| Not determined | | | | | | | | |
| Recency (published last 5 years) of books circulating: | | | | | | | | Circulation distribution sample |
| Recent | | | | | | | | |
| Not recent | | | | | | | | |
| Not determined | | | | | | | | |
| Appropriateness of periodical collection | .00 | .00 | | .00 | | .00 | | |
| Probability of ownership of periodicals by type: | | | | | | | | Periodical availability sample |
| Applied Science & Tech. | | | | | | | | |
| Art | | | | | | | | |
| Biological and Agricult. | | | | | | | | |
| Business | | | | | | | | |
| Education | | | | | | | | |
| Public Affairs | | | | | | | | |
| Reader's Guide | | | | | | | | |
| Social Sciences | | | | | | | | |
| Overall | | | | | | | | |

Name of Library: ______________________________

| | | Regional --- Libraries --- | | Community --- Libraries --- | | Community-School --- Libraries --- | | |
|---|---|---|---|---|---|---|---|---|
| Measure | Your Library | Median | Low-High Range | Median | Low-High Range | Median | Low-High Range | Sources |
| Comprehensiveness of reference collection | .00 | .00 | | .00 | | .00 | | |
| Probability of ownership of reference books | | | | | | | | Reference title ownership sample (ALA) |
| Appropriateness of reference collection | | | | | | | | |
| Probability of ownership of reference books by class: | | | | | | | | Reference title ownership sample (ALA) |
| Biblio. & General Works | | | | | | | | |
| Encyclopedias | | | | | | | | |
| Philosophy & Religion | | | | | | | | |
| Psychology | | | | | | | | |
| Business & Economics | | | | | | | | |
| Social Sciences | | | | | | | | |
| Education | | | | | | | | |
| Science & Technology | | | | | | | | |
| Art | | | | | | | | |
| Music | | | | | | | | |
| Cinema, Dance & Theater | | | | | | | | |
| Games, Sports & Hobbies | | | | | | | | |
| Language | | | | | | | | |
| Literature | | | | | | | | |
| Geog., Travel & Archaeol. | | | | | | | | |
| History | | | | | | | | |
| Biog., Genealogy & Names | | | | | | | | |
| Recency of reference collection | | | | | | | | Reference title ownership sample (ALA) |
| Proportion of owned reference books which are latest editions | | | | | | | | |

Name of Library: Hawaii State Library Resource Center

---

Measures:

Comprehensiveness of reference collection

Probability of ownership of reference books

Appropriateness of reference collection

Probability of ownership of reference books by class

Recency of reference collection

Proportion of owned reference books which are latest editions

(To include results for these performance measures in the Libraries Measurements Report for the Hawaii State Library Resource Center, attach to this page a copy of the completed REFERENCE TITLE OWNERSHIP SAMPLE: FORM 2 found in Section 5 of this manual.)

Name of Library: ____________________

| | | Regional Libraries | | Community Libraries | | Community-School Libraries | | |
|---|---|---|---|---|---|---|---|---|
| Measure | Your Library | Median | Low-High Range | Median | Low-High Range | Median | Low-High Range | Source |
| Appropriateness of target groups served | No. % | % | | % | | % | | |
| Each user group's proportion of all walk-in users: | | | | | | | | Library user sample |
| Sex | | | | | | | | |
| Male | | | | | | | | |
| Female | | | | | | | | |
| No response | | | | | | | | |
| Purpose of visit | | | | | | | | |
| Personal | | | | | | | | |
| School | | | | | | | | |
| Club or organization | | | | | | | | |
| Work -- Private | | | | | | | | |
| Work -- Government | | | | | | | | |
| Other | | | | | | | | |
| No response | | | | | | | | |
| Student status | | | | | | | | |
| Part Time | | | | | | | | |
| Full Time | | | | | | | | |
| No response | | | | | | | | |

Name of Library: ______________________________

| | | Regional Libraries | | Community Libraries | | Community-School Libraries | | |
|---|---|---|---|---|---|---|---|---|
| Measure | Your Library | Median | Low-High Range | Median | Low-High Range | Median | Low-High Range | Source |
| Appropriateness of target groups served (continued) | No. % | % | | % | | % | | |
| Each user group's proportion of all walk-in users (continued): | | | | | | | | Library user sample |
| School level | | | | | | | | |
| Nursery | | | | | | | | |
| Elementary | | | | | | | | |
| Jr. High | | | | | | | | |
| High School | | | | | | | | |
| College | | | | | | | | |
| Post Graduate | | | | | | | | |
| Tech/Vocational | | | | | | | | |
| Other | | | | | | | | |
| No response | | | | | | | | |
| User satisfaction with services | | | | | | | | |
| Proportion of users expressing satisfaction with library services: | | | | | | | | Library user sample |
| Yes | | | | | | | | |
| No | | | | | | | | |
| Partially | | | | | | | | |
| No response | | | | | | | | |

Name of Library: ______________________________

| | | Regional Libraries | | Community Libraries | | Community-School Libraries | | |
|---|---|---|---|---|---|---|---|---|
| Measure | Your Library | Median | Low-High Range | Median | Low-High Range | Median | Low-High Range | Source |
| Quantity of interloan service | No. | No. | | No. | | No. | | |
| Number of interloan requests filled | | | | | | | | Count by library |
| Responsiveness of interloan service | .00 | .00 | | .00 | | .00 | | |
| Proportion of interloan requests filled | | | | | | | | Interloan request sample |
| Responsiveness of interloan service by class of book | | | | | | | | |
| Proportion of interloan requests filled by class of book: | | | | | | | | Interloan request sample |
| Adult fiction | | | | | | | | |
| Gen. Works, Phil., Rel. | | | | | | | | |
| Soc. Sciences, Languages | | | | | | | | |
| Pure Science, Technology | | | | | | | | |
| The Arts, Literature | | | | | | | | |
| History, Biography | | | | | | | | |
| Juvenile fiction | | | | | | | | |
| Juvenile non-fiction | | | | | | | | |
| Haw. & Pac., Foreign | | | | | | | | |
| Not determined | | | | | | | | |
| Responsiveness of interloan service by recency of book | | | | | | | | |
| Proportion of interloan requests filled for recent (published last 5 years) books | | | | | | | | Interloan request sample |

Name of Library:______________________________

| | | | Regional Libraries | | Community Libraries | | Community-School Libraries | | |
|---|---|---|---|---|---|---|---|---|---|
| Measure | Your Library | | Median | Low-High Range | Median | Low-High Range | Median | Low-High Range | Source |
| Responsiveness of information and reference service | No. | % | % | | % | | % | | |
| Proportion of information requests answered within library: | | | | | | | | | Information requests sample |
| Answered | | | | | | | | | |
| Referred | | | | | | | | | |
| Not answered | | | | | | | | | |

Name of Library: ______________________________

| | | Regional Libraries | | Community Libraries | | Community-School Libraries | | |
|---|---|---|---|---|---|---|---|---|
| Measure | Your Library | Median | Low-High Range | Median | Low-High Range | Median | Low-High Range | Source |
| Book collection | .00 | .00 | | .00 | | .00 | | |
| Probability of ownership of books published last 5 years | | | | | | | | BPR probability sample |
| Probability of availability of owned books published last 5 years | | | | | | | | BPR probability sample |
| Availability of book collection | | | | | | | | Title availability sample |
| Availability of book collection by class of book: | | | | | | | | Title availability sample |
| Adult fiction | | | | | | | | |
| Gen. Works, Phil., Rel. | | | | | | | | |
| Soc. Sciences, Languages | | | | | | | | |
| Pure Science, Technology | | | | | | | | |
| The Arts, Literature | | | | | | | | |
| History, Biography | | | | | | | | |
| Juvenile fiction | | | | | | | | |
| Juvenile non-fiction | | | | | | | | |
| Haw. & Pac., Foreign | | | | | | | | |
| Not determined | | | | | | | | |
| Availability of book collection by recency (published last 5 years): | | | | | | | | Title availability sample |
| Recent | | | | | | | | |
| Not recent | | | | | | | | |

Name of Library:______________________________

| | | | Regional --- Libraries --- | | Community --- Libraries --- | | Community-School --- Libraries --- | | |
|---|---|---|---|---|---|---|---|---|---|
| Measure | Your Library | | Median | Low-High Range | Median | Low-High Range | Median | Low-High Range | Source |
| **Materials in circulation** | No. | % | % | | % | | % | | |
| Types of materials borrowed in an average day: | | | | | | | | | Circulation distribution sample |
| Books | | | | | | | | | |
| Pictures | | | | | | | | | |
| Pamphlets | | | | | | | | | |
| Paperbacks | | | | | | | | | |
| Records | | | | | | | | | |
| Undetermined | | | | | | | | | |
| Total | | | | | | | | | |
| Average number of items per borrower: | | | | | | | | | Circulation distribution sample |
| Books, pictures, pamphlets, paperbacks, undetermined | | | | | | | | | |
| Records | | | | | | | | | |
| All items | | | | | | | | | |

Name of Library: ______________________________

| | | | Regional Libraries | | Community Libraries | | Community-School Libraries | | |
|---|---|---|---|---|---|---|---|---|---|
| **Measure** | **Your Library** | | **Median** | **Low-High Range** | **Median** | **Low-High Range** | **Median** | **Low-High Range** | **Source** |
| **Use of library** | No. | % | % | | % | | % | | |
| Materials and items in use in library during average day: | | | | | | | | | In-library circulation sample |
| Reference | | | | | | | | | |
| Fiction | | | | | | | | | |
| Non-fiction | | | | | | | | | |
| Periodical | | | | | | | | | |
| Newspaper | | | | | | | | | |
| Document | | | | | | | | | |
| Telephone book | | | | | | | | | |
| Microfilm | | | | | | | | | |
| Micro-card | | | | | | | | | |
| Slide | | | | | | | | | |
| Filmstrip | | | | | | | | | |
| Audio tape/Cassette | | | | | | | | | |
| Vertical file | | | | | | | | | |
| Phono record | | | | | | | | | |
| Other | | | | | | | | | |
| **Library users** | No. | | No. | | No. | | No. | | |
| Average number of walk-in library users per day | | | | | | | | | Library user sample |
| Average time spent per walk-in library user (in hours) | | | | | | | | | Library user sample |

Name of Library:________________________________

| | | | Regional Libraries | | Community Libraries | | Community-School Libraries | | |
|---|---|---|---|---|---|---|---|---|---|
| Measure | Your Library | | Median | Low-High Range | Median | Low-High Range | Median | Low-High Range | Source |
| Library users (continued) | No. | % | % | | % | | % | | |
| Time of arrival of walk-in users in an average day: | | | | | | | | | Library user sample |
| 9:00 - 9:59 | | | | | | | | | |
| 10:00 - 10:59 | | | | | | | | | |
| 11:00 - 11:59 | | | | | | | | | |
| 12:00 - 12:59 | | | | | | | | | |
| 1:00 - 1:59 | | | | | | | | | |
| 2:00 - 2:59 | | | | | | | | | |
| 3:00 - 3:59 | | | | | | | | | |
| 4:00 - 4:59 | | | | | | | | | |
| 5:00 - 5:59 | | | | | | | | | |
| 6:00 - 6:59 | | | | | | | | | |
| 7:00 - 7:59 | | | | | | | | | |
| 8:00 - 8:59 | | | | | | | | | |
| 9:00 - 9:59 | | | | | | | | | |
| Not determined | | | | | | | | | |

Name of Library: ____________________

| | | | Regional Libraries | | Community Libraries | | Community-School Libraries | | |
|---|---|---|---|---|---|---|---|---|---|
| Measure | Your Library | | Median | Low-High Range | Median | Low-High Range | Median | Low-High Range | Source |
| Information requests | No. | % | % | | % | | % | | |
| Sources used to answer information requests: | | | | | | | | | Information requests sample |
| Card catalogue | | | | | | | | | |
| Reference collection | | | | | | | | | |
| Circulating collection | | | | | | | | | |
| Periodical index | | | | | | | | | |
| Periodical | | | | | | | | | |
| Vertical file | | | | | | | | | |
| Other source | | | | | | | | | |
| Central library | | | | | | | | | |
| Other library | | | | | | | | | |
| Other agency | | | | | | | | | |
| Type of information request: | | | | | | | | | Information requests sample |
| Directional | | | | | | | | | |
| Bibliographical | | | | | | | | | |
| Topical | | | | | | | | | |
| Factual | | | | | | | | | |
| Not determined | | | | | | | | | |
| Form of information request: | | | | | | | | | Information requests sample |
| In person | | | | | | | | | |
| Telephone | | | | | | | | | |
| Mail | | | | | | | | | |
| Not determined | | | | | | | | | |

Name of Library: ______________________________

| | | | Regional Libraries | | Community Libraries | | Community-School Libraries | | |
|---|---|---|---|---|---|---|---|---|---|
| Measure | Your Library | | Median | Low-High Range | Median | Low-High Range | Median | Low-High Range | Source |
| Information requests (continued) | No. | % | % | | % | | % | | |
| Type of person making information request: | | | | | | | | | Information requests sample |
| Adult | | | | | | | | | |
| Other library | | | | | | | | | |
| Student | | | | | | | | | |
| Not determined | | | | | | | | | |
| Adult breakdown | | | | | | | | | |
| Personal use | | | | | | | | | |
| Business | | | | | | | | | |
| Federal | | | | | | | | | |
| State | | | | | | | | | |
| County | | | | | | | | | |

Name of Library:________________________________

| Measure | Your Library | | Regional Libraries | | Community Libraries | | Community-School Libraries | | Source |
|---|---|---|---|---|---|---|---|---|---|
| | | | Median | Low-High Range | Median | Low-High Range | Median | Low-High Range | |
| Information requests (continued) | No. | % | % | | % | | % | | |
| Time of information request: | | | | | | | | | Information requests sample |
| 9:00 - 9:59 | | | | | | | | | |
| 10:00 - 10:59 | | | | | | | | | |
| 11:00 - 11:59 | | | | | | | | | |
| 12:00 - 12:59 | | | | | | | | | |
| 1:00 - 1:59 | | | | | | | | | |
| 2:00 - 2:59 | | | | | | | | | |
| 3:00 - 3:59 | | | | | | | | | |
| 4:00 - 4:59 | | | | | | | | | |
| 5:00 - 5:59 | | | | | | | | | |
| 6:00 - 6:59 | | | | | | | | | |
| 7:00 - 7:59 | | | | | | | | | |
| 8:00 - 8:59 | | | | | | | | | |
| 9:00 - 9:59 | | | | | | | | | |
| Not determined | | | | | | | | | |

## SECTION 2:

## BOOK PUBLISHING RECORD PROBABILITY SAMPLE

The "BPR" sample is a sample of books published within the last five years. It is used to determine the probability of a user finding and obtaining a recently published book within a particular library.

## SELECTION OF THE "BPR" PROBABILITY SAMPLE

Since every library within the State library system can use the same sample to assess its book holdings, the sample itself will be drawn under the direction of the Office of Library Services. A copy of this sample will be sent to your library. Prior to the period when the measurement of your library is to take place, you will be sent sheets of Xerox lables. A total of approximately 500 labels will be contained on these sheets. Each label will contain:

Author
Title
Year of Publication

for a book published within the previous five years.

To prepare your copy of the "BPR" sample for use in measuring your library's holdings, peel off each label from each sheet and attach it to a 3" x 5" index card. You will now have approximately 500 index cards, and will be prepared to check this sample against your book holdings and shelf stock.

Next year, when you are required to repeat the "BPR" measurement of your collection, the Office of Library Services will send you Xerox sheets containing approximately 100 labels with an author, title and year of publication on each. To "update" your "BPR" sample for that year's measurement, you will simply:

1. Peel off these 100 or so labels and place them on 3" x 5" cards.

2. Go through your previous year's sample and pull out the cards featuring books with a publishing date that is now more than five years old.

3. Replace the "outdated" sample of 100 or so cards with the "new" sample of 100 or so cards.

You will now have an "updated" "BPR" sample, and can conduct your measurement in the same way that you did one year ago.

The next four pages in this section provide instructions for the Office of Library Services to follow in drawing the "BPR" sample, and are not relevant to you. Please skip to the next part of this section entitled "Data Gathering."

(Instructions for Office of Library Services)

## PROCEDURE FOR SELECTING "BPR" PROBABILITY SAMPLE

The following materials are required:

1. Cumulative indices of the American Book Publishing Record for the preceding five years.
2. A supply of 3" x 5" index cards.
3. A supply of Xerox label sheets (standard 33 labels per sheet - capable of being run through Xerox or other plain bond copier machines).

The following is the procedure for selecting the titles. The procedure calls for the selection of a total sample of 500 titles. In subsequent years, the sample can be updated through drawing a sample of 100 titles from the Book Publishing Record index for the previous calendar year.

Step 1: Determining the number of titles to be selected.

Number of years to be included in sample = 5
Sample size = 500
Number of titles per annual index - 500/5 = 100

Step 2: Determining the page interval

Determine the number of pages which contain citations for non-fiction, fiction and juvenile fiction titles. Omit all introductory pages and indices. If, for example, there are 800 pages in these three sections, the page interval will equal 800/100 = 8. (If the quotient contains a decimal of .5 or more, round to the next integer.) In the example, the titles will be selected from every eighth page starting from a randomly-selected page between 1 and 8. The actual page would be determined through reference to the Table of Random Numbers contained on the next page. Select a row or column of digits in the Table of Random Numbers, and proceed through that row or column until you come to the first number whose last digit is between 1 and 8. If the first number is 47, for example, the first page sampled would be 7, and the next pages would be 15, 23, 31, etc.

Step 3: Sampling of titles on selected page.

Locate the first page to be sampled. In this example, it would be page 7.

(a) Count the number of titles listed on the page omitting any listing that begins on the previous page but including partial entries at the end of the page.

# TABLE OF RANDOM NUMBERS

| | | | | |
|---|---|---|---|---|
| 10 09 73 25 33 | 76 52 01 35 86 | 34 67 35 48 76 | 80 95 90 91 17 | 39 29 27 49 45 |
| 37 54 20 48 05 | 64 89 47 42 96 | 24 80 52 40 37 | 20 63 61 04 02 | 00 82 29 16 65 |
| 08 42 26 89 53 | 19 64 50 93 03 | 23 20 90 25 60 | 15 95 33 47 64 | 35 08 03 36 06 |
| 99 01 90 25 29 | 09 37 67 07 15 | 38 31 13 11 65 | 88 67 67 43 97 | 04 43 62 76 59 |
| 12 80 79 99 70 | 80 15 73 61 47 | 64 03 23 66 53 | 98 95 11 68 77 | 12 17 17 68 33 |
| 66 06 57 47 17 | 34 07 27 68 50 | 36 69 73 61 70 | 65 81 33 98 85 | 11 19 92 91 70 |
| 31 06 01 08 05 | 45 57 18 24 06 | 35 30 34 26 14 | 86 79 90 74 39 | 23 40 30 97 32 |
| 85 26 97 76 02 | 02 05 16 56 92 | 68 66 57 48 18 | 73 05 38 52 47 | 18 62 38 85 79 |
| 63 57 33 21 35 | 05 32 54 70 48 | 90 55 35 75 48 | 28 46 82 87 09 | 83 49 12 56 24 |
| 73 79 64 57 53 | 03 52 96 47 78 | 35 80 83 42 82 | 60 93 52 03 44 | 35 27 38 84 35 |
| 98 52 01 77 67 | 14 90 56 86 07 | 22 10 94 05 58 | 60 97 09 34 33 | 50 50 07 39 98 |
| 11 80 50 54 31 | 39 80 82 77 32 | 50 72 56 82 48 | 29 40 52 42 01 | 52 77 56 78 51 |
| 83 45 29 96 34 | 06 28 89 80 83 | 13 74 67 00 78 | 18 47 54 06 10 | 68 71 17 78 17 |
| 88 68 54 02 00 | 86 50 75 84 01 | 36 76 66 79 51 | 90 36 47 64 93 | 29 60 91 10 62 |
| 99 59 46 73 48 | 87 51 76 49 69 | 91 82 60 89 28 | 93 78 56 13 68 | 23 47 83 41 13 |
| 65 48 11 76 74 | 17 46 85 09 50 | 58 04 77 69 74 | 73 03 95 71 86 | 40 21 81 65 44 |
| 80 12 43 56 35 | 17 72 70 80 15 | 45 31 82 23 74 | 21 11 57 82 53 | 14 38 55 37 63 |
| 74 35 09 98 17 | 77 40 27 72 14 | 43 23 60 02 10 | 45 52 16 42 37 | 96 28 60 26 55 |
| 69 91 62 68 03 | 66 25 22 91 48 | 36 93 68 72 03 | 76 62 11 39 90 | 94 40 05 64 18 |
| 09 89 32 05 05 | 14 22 56 85 14 | 46 42 75 67 88 | 96 29 77 88 22 | 54 38 21 45 98 |
| 91 49 91 45 23 | 68 47 92 76 86 | 46 16 28 35 54 | 94 75 08 99 23 | 37 08 92 00 48 |
| 80 33 69 45 98 | 26 94 03 68 58 | 70 29 73 41 35 | 53 14 03 33 40 | 42 05 08 23 41 |
| 44 10 48 19 49 | 85 15 74 79 54 | 32 97 92 65 75 | 57 60 04 08 81 | 22 22 20 64 13 |
| 12 55 07 37 42 | 11 10 00 20 40 | 12 86 07 46 97 | 96 64 48 94 39 | 28 70 72 58 15 |
| 63 60 64 93 29 | 16 50 53 44 84 | 40 21 95 25 63 | 43 65 17 70 82 | 07 20 73 17 90 |
| 61 19 69 04 46 | 26 45 74 77 74 | 51 92 43 37 29 | 65 39 45 95 93 | 42 58 26 05 27 |
| 15 47 44 52 66 | 95 27 07 99 53 | 59 36 78 38 48 | 82 39 61 01 18 | 33 21 15 94 66 |
| 94 55 72 85 73 | 67 89 75 43 87 | 54 62 24 44 31 | 91 19 04 25 92 | 92 92 74 59 73 |
| 42 48 11 62 13 | 97 34 40 87 21 | 16 86 84 87 67 | 03 07 11 20 59 | 25 70 14 66 70 |
| 23 52 37 83 17 | 73 20 88 98 37 | 68 93 59 14 16 | 26 25 22 96 63 | 05 52 28 25 62 |
| 04 49 35 24 94 | 75 24 63 38 24 | 45 86 25 10 25 | 61 96 27 93 35 | 65 33 71 24 72 |
| 00 54 99 76 54 | 64 05 18 81 59 | 96 11 96 38 96 | 54 69 28 23 91 | 23 28 72 95 29 |
| 35 96 31 53 07 | 26 89 80 93 54 | 33 35 13 54 62 | 77 97 45 00 24 | 90 10 33 93 33 |
| 59 80 80 83 91 | 45 42 72 68 42 | 83 60 94 97 00 | 13 02 12 48 92 | 78 56 52 01 06 |
| 46 05 88 52 36 | 01 39 09 22 86 | 77 28 14 40 77 | 93 91 08 36 47 | 70 61 74 29 41 |
| 32 17 90 05 97 | 87 37 92 52 41 | 05 56 70 70 07 | 86 74 31 71 57 | 85 39 41 18 38 |
| 69 23 46 14 06 | 20 11 74 52 04 | 15 95 66 00 00 | 18 74 39 24 23 | 97 11 89 63 38 |
| 19 56 54 14 30 | 01 75 87 53 79 | 40 41 92 15 85 | 66 67 43 68 06 | 84 96 28 52 07 |
| 45 15 51 49 38 | 19 47 60 72 46 | 43 66 79 45 43 | 59 04 79 00 33 | 20 82 66 95 41 |
| 94 86 43 19 94 | 36 16 81 08 51 | 34 88 88 15 53 | 01 54 03 54 56 | 05 01 45 11 76 |

SOURCE: The RAND Corporation, *A Million Random Digits*, Free Press, Glencoe, Ill., 1955

(Instructions for Office of Library Services:)

(b) Using the digits from the random numbers table, select the first number on the list that is less than or equal to the number of titles listed on the page. For example, if there are 44 entries on the page and the random numbers list is as follows:

99
81
47
03
15
24
69

You would select the third (03) title listed on the page (omitting entries carried over from the preceding page) because 99, 81 and 47 are greater than the number of entries on the page.

(c) On the next page to be sampled, in this example page 15, you would follow the same procedure continuing down the list of random numbers. For example, if page 15 contains 51 entries you would choose the fifteenth (15th) entry on the page because it is the next number on the list that is equal to or less than the number of entries on the page.

NOTE: You are to exercise no judgement on the appropriateness of any title for your library. Even if a title to be drawn is one you would never select, you are to record it anyway.

Step 4: Recording the Information.

For each title selected by the method outlined above, write the following information from "BPR" on a 3" x 5" index card:

Author's Name
Title
Year of Publication

Step 5: Continuation of Sampling.

Continue sampling the proper page interval in the "BPR" cumulative index for the year.

(a) When there are fewer pages remaining than your page interval in the year you are sampling, move to the next annual index. For example, if you have only five pages left, you now count in three pages in next appropriate random number.

(Instructions for Office of Library Services:)

Step 6:

For each annual volume, repeat Steps 2, 3 and 4.

Step 7: Transfer of Sample Titles to Xerox Label Sheets

(a) Make sure that the index cards are separated by title's year of publication.

(b) Take index cards representing a sample for one year. Type the information from each index card onto a label on a Xerox label sheet master (ten label sheet masters are provided in each box of 100 Xerox label sheets). It will take three to four label sheet masters to accommodate the sample of 100 or so titles for a year.

(c) Repeat this process for other years sampled. Make sure each different year's sample starts on a new label sheet master.

Step 8: Reproduction and Distribution of "BPR" Sample

(a) Using a plain bond copier machine, reproduce the information from each label sheet master onto Xerox label sheets. Make enough copies for all libraries in the State system.

(b) Distribute the label sheets containing the "BPR" sample to libraries throughout the State system.

NOTE: In subsequent years, it will only be necessary to select, reproduce and distribute a "BPR" sample from the Book Publishing Record for the previous calendar year, to allow individual libraries to "update" their sample.

## DATA GATHERING

Step 1:

Alphabetize your "BPR" sample of approximately 500 index cards by main entry.

Step 2:

Using a copy machine, make a copy of "BPR" Probability Sample: Form 1. Record all subsequent entries relevant to "BPR" Probability Sample: Form 1 on this copy.

Step 3:

Count the total number of titles in your sample, and enter the number under "Number of Titles in Sample" on "BPR" Probability Sample: Form 1.

Step 4:

Check all titles drawn for the "BPR" Probability Sample in the public catalogue. If your library owns the title, record the classification number on the card. Indicate juvenile titles by J.

Some of these titles in the sample are reprints or new edition. If a title you own has a different publication date from that listed or is a different edition, you may count this as a title owned.

Step 5:

Separate the index cards into two piles: Owned and not owned.

Step 6:

Count the number of titles that your library owns. Enter this figure beside "Titles Owned" on "BPR" Probability Sample: Form 1.

Step 7:

For those titles that you own, check the shelves to see if the books are actually available. If a book is on the shelf, place a check mark on the index card. DO NOT SEARCH FOR MISSING BOOKS. If possible, this measure should be done on or close to the day your library is being monitored.

DATA GATHERING (continued)

Step 8:

Separate the cards representing titles owned into two piles: Available and not available.

TABULATION

Step 1:

Count the number of titles on the shelves. Enter this figure beside "Titles Available" on "BPR" Probability Sample: Form 1.

Step 2:

In order to determine the probability that your library owns a recently published title, divide the "Titles Owned" by the number of titles in the sample (approximately 500). Record this quotient on "BPR" Probability Sample: Form 1 as "Probability of Ownership."

Step 3:

In order to determine the availiability of the books owned, divide the "Titles Available" by the "Titles Owned." Record this quotient on "BPR" Probability Sample: Form 1 as "Probability of Availability."

Step 4:

Finally, in order to determine users' success in obtaining any titles listed in "BPR" for the last five years, multiply the "Probability of Ownership" by the "Probability of Availability." Enter the quotient as "Success Score" on "BPR" Probability Sample: Form 1.

Example: Number of titles in sample = 500
Number of titles owned = 200
Number of titles on shelf = 150

The following would be your probabilities:

(Step 2) "Probability of Ownership" = 200/500 or 0.4. Thus, a user would have four chances in ten of finding that you owned a recently published title.

(Step 3) "Probability of Availability" of books owned = 150/200 or 0.75. Thus, a user would have seven and a half chances in ten of obtaining a recently published title listed in your public catalogue.

(Step 4) "Success Score" = 0.4 x 0.75 or 0.3. Thus, a user would have three chances in ten of obtaining any title listed in "BPR" for the last five years.

## "BPR" PROBABILITY SAMPLE: FORM 1

Name of Library: ______________________

| No. of Titles in Sample | Titles Owned | Titles Available | Probability of Ownership | Probability of Availability | Success Score |
|---|---|---|---|---|---|
| | | | | | |

62

## SECTION 3:

## TITLE AVAILABILITY SAMPLE

The "Title Availability Sample" will provide descriptive information about the books your library already owns, and estimates of the shelf availability of those books.

You will be involved in drawing a sample of 500 titles from your shelf-list and recording information about that sample. The resulting information will be tabulated for you through computer processing. The Office of Library Services will receive the data you record and will send you tabulated results.

## SELECTION OF THE TITLE AVAILABLITY SAMPLE

Include: Both adult and juvenile titles
Exclude: Reference and other non-circulating titles

BUT: If non-circulating titles are interfiled with circulating, all titles must be included.

### Step 1:

Take a ruler and measure the total number of inches of tightly-packed cards in each drawer of the shelf-list, omitting reference and non-circulating collections. Do not measure the length of the drawer itself. If you use a retractable metal ruler with a hook on the end, you can hook around the pack of cards.

Measure the cards on their side rather than on top. This gives a more accurate measurement since you will not have to contend with tabs on guide cards.

(a) Record the total number of inches for all circulating titles on the Shelf-list Distribution Form.

### Step 2:

Open any drawer of the shelf-list at random, but exclude section containing non-circulating titles.

(a) Use the ruler to measure a one-inch-thick pack of cards. Hold the pack tightly when you are measuring it.

(b) Put markers before and after these cards, and count how many cards are in this one-inch pack.

(c) Record this number of the Shelf-list Distribution Form, as Sample 1.

Step 3:

Repeat the same process six more times, using a different drawer each time and a different location in each drawer.

(a) Record the number of cards per inch for each sample on the Shelf-list Distribution Form, for Samples 2 through 7.

(b) If the number of cards varies by more than four from the average, you are not applying an equal pressure on each inch sample. In this case, repeat the entire measurement process.

Step 4:

Determine the number of cards between each sample card to be drawn, as follows and record your computations on the Shelf-list Distribution Form.

(a) Average the number of cards per inch for the seven samples by dividing the sum of the seven samples by 7.

(b) Multiply the average by the total number of inches of cards which the entire shelf-list occupies, omitting reference materials.

(c) Divide your answer by 500. The quotient obtained is the number of cards between each sample interval.

(d) Divide the average number of cards per inch into the number of cards between each sample interval. The answer obtained tells the number of inches between those cards to be drawn for the sample. The cards selected should be as close as possible to the exact sample interval.

Here is an example of how to proceed, but you must substitute the actual measurements from your own library. Use the Shelf-list Distribution Form as a worksheet.

How to calculate the number of cards between each sample card:

80 = average number of cards per inch
320 inches = length of shelf-list minus reference

(i) 80 x 320 = 25,600 = total number of cards in shelf-list excluding reference

(ii) 25,600/500 = 51.2 cards per sample interval

(iii) 51.2/80 = 0.64 inches per sample interval

## SHELF-LIST DISTRIBUTION FORM

Name of Library:____________________

Step 1: Take seven different samples from shelf-list and record the number of cards per inch in each sample.

Sample 1________________
Sample 2________________
Sample 3________________
Sample 4________________
Sample 5________________
Sample 6________________
Sample 7________________
Sum ________________

Step 2: Divide sum above by seven = ________________(Average number of cards/inch)

Step 3: Measure length of shelf-list in inches (do not include reference) = ________________(Inches in shelf-list)

Step 4: Multiply total inches of shelf-list by average number of cards per inch (Step 2 x Step 3) = ________________(Total cards in shelf-list)

Step 5: Divide total cards in shelf-list by 500 (Step 4 ÷ 500) = ________________(Number of cards per sample interval)

Step 6: Divide number of cards per sample interval by average number of cards per inch (Step 5 ÷ Step 2) = ________________(Inches per sample interval in 100ths)

Step 7: Convert inches per interval from "hundredths" to "sixteenths" by means of Index table below = ________________(Inches per sample interval in 16ths)

### Interval Index

Quotient/Sixteenths
0.0625 = 1/16
.1250 = 2/16
.1875 = 3/16
.2500 = 4/16
.3125 = 5/16
.3750 = 6/16
.4375 = 7/16
.5000 = 8/16

Quotient/Sixteenths
0.5625 = 9/16
.6250 = 10/16
.6875 = 11/16
.7500 = 12/16
.8125 = 13/16
.8750 = 14/16
.9375 = 15/16
1.0 = 16/16

The Interval Index on the Shelf-list Distribution Form allows you to correlate the quotient (inches per sample interval) obtained in Step (c) with the inch interval sample cards to be drawn. For instance, the answer for Step (c) in this example is .64, which falls nearer to .625 than to .6875 on the Interval Index. Therefore, you should use 10/16 or 5/8 of an inch interval between sample cards.

A short cut, if you are not interested in having an approximation of the number of shelf-list cards is: Divide the total number of inches by 500 (320/500 = 0.64); then calculate the quotient with the Interval Index.

Remember, the actual number of inches per sample interval must be determined by you on the basis of the length of your shelf-list and the average number of cards per inch in your library.

Step 5:

Take the answer which you obtained for step (iii) in the example which correlates with the Index numbers. This will be the inch interval for your library which you will use for the remainder of this section. If you mark your inch interval in ink on your ruler, it will save time and eye strain.

Step 6:

In preparation for actual selection of the sample from your shelf-list, use a copy machine to make a sufficient number of copies of Title Availability Sample: Form 1. Since you will be drawing a sample of about 500 titles, you will need to make about 25 copies.

As you select titles and record information about them in subsequent steps below, make sure you record a sequential indentification number for each title selected in the leftmost column of Title Availability Sample: Form 1. Your identification numbers will run from 1 to about 500.

Step 7:

Open the first drawer of the shelf-list. Measure in your inch interval. Choose the card closest to that interval. If the card drawn is a reference title, do not use it. Take the next card. Write the following information about that card on the Title Availability Sample: Form 1 (TAS: Form 1).

(a) Complete call number including Cutter. If the title drawn is a juvenile title, precede the call number with a J. If the title is fiction, precede it with an F. Juvenile fiction titles should be indicated by JF.

(b) Write the author's last name and first initial under the "Author" column.

(c) Under the "Title" column, indicate the first letter of each word in the title. For example, Another Country would be recorded AC.

(d) Write the year of publication in the indicated column.

Step 8:

To draw the second card, move in whatever your inch interval is from the first card drawn. Take the card closest to your inch interval. Again, if the card drawn is a reference title, take the next card. Record the information indicated above on the same Form 1.

(a) Keep moving forward your appropriate inch interval each time until you have gone through the entire shelf-list for circulating books. This should equal approximately 500 cards.

(b) If you have part of an interval remaining at the end of a drawer, carry this number forward to the next drawer. For example, if your interval is 5/8th's and you have a 1/8th inch pack of cards left at the end of the drawer, you would measure in 4/8th's of an inch to draw the first card in the next drawer. Remember, the numbers we have used are only examples. You must calculate the correct inch interval for your library.

Step 9:

Once the shelf-list sample is completed, check the shelves and note by a checkmark if the book is on the shelf. If the book is not on the shelf, leave the "On Shelf" column blank. This should be done on or as close as possible to the day your library is to be monitored.

(a) Do not search for missing books.

## TRANSFER OF SAMPLE INFORMATION TO CODING SHEETS:

Next, you will be transferring the information recorded on Title Availability Sample: Form 1 to coding sheets, which will be submitted to the Office of Library Services for data processing.

Step 1: Preparation of Coding Sheets

(a) Using a copy machine, make one copy of Title Availability Sample: Form 2. In columns 23 and 24 of every row of that copy, record your library budget code number, which can be found on page 8 of this manual.

Finally, record the name of your library in the upper left hand corner of that copy.

(b) Next, using the copy machine again, make a sufficient number of copies of that copy of Title Availability Sample: Form 2. About 25 copies should be enough. You will be recording information from Title Availability Sample: Form 1 onto these copies.

63

## Step 2: Recording Onto Coding Sheets

Following the coding guide given in "Title Availability Sample: Coding for Form 2," copy the information from your Title Availability Sample: Form 1 sheets onto the Title Availability Sample: Form 2 coding sheets.

## Step 3: Submission of Information

Send the completed Title Availability Sample: Form 2 coding sheets to the Office of Library Services. They will have the information tabulated by computer and will return the results to you.

## TITLE AVAILABILITY SAMPLE: FORM 1

Name of Library:________________________

| Item No. | Call No. | Author | Title Initials | Year of Pub. | On Shelf |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

70

## TITLE AVAILABILITY SAMPLE: CODING FOR FORM 2

| coding sheet column(s): | code: | code values: |
|---|---|---|
| 1-3 | item number | Sequence number of sample item<br>Note: Item numbers which are less than three digits must have zeros (0's) placed in front of them. For example, item number "23" would be recorded as "023" |
| 5 | book type | 1 = Adult fiction*<br>2 = Adult non-fiction<br>3 = Biography<br>4 = Juvenile fiction<br>5 = Juvenile non-fiction<br>6 = Hawaii & Pacific<br>7 = Foreign<br>8 = Not determined<br>*Includes mysteries, science fiction, and westerns |
| 6-7 | Dewey Decimal class | First two digits of Dewey Decimal number<br>Note: Record only for books that have a Dewey Decimal number |
| 9-10 | year of publication code | Last two digits of year of publication<br>For example, if the year of publication is 1972, the two digit code would be "72." If the book was published prior to 1900, use "00" as the code |
| 12 | title availability code | 1 = book on shelf<br>0 = book not on shelf |

## TITLE AVAILABILITY SAMPLE: CODING FOR FORM 2 (CONTINUED)

| coding sheet column(s): | code: | code values: |
|---|---|---|
| 23-24 | library code | Code number for your library. See page 8 of this manual. |

72

## TITLE AVAILABILITY SAMPLE: FORM 2

Coding Sheet

Sheet no. ____

Name of Library:________________________________

| item number | | | | book type | Dewey Decimal class (1st 2 digits) | | | year of publication | | | title availability | | | | | | | | | | | library code | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

# SECTION 4:

# PERIODICAL AVAILABILITY SAMPLE

The "Periodical Availability Sample" will enable a measurement of a user's success in obtaining periodicals of different types within your library. The sample of periodicals to be used in this measurement has already been developed by the developers of the library performance measurement system on which this manual is based.[1] The list of periodical titles used in the sample was randomly selected from the following eight indices for periodicals commonly held by public libraries:

- Applied Science and Technology Index
- Art Index
- Biological and Agricultural Index
- Business Periodicals Index
- Education Index
- Public Affairs Information Service
- Readers' Guide
- Social Sciences Index

The sample titles were drawn in the following manner:

(1) A list of all periodicals indexed in these eight sources was compiled from recent issues.

(2) The list was cleaned of double entries, and all titles were numbered consecutively.

(3) Forty journals were selected from each of the eight periodical indices by use of a random number table.

The purpose of this randomly selected sample of periodicals is not only to describe the periodicals that your library holds, but to determine the probability that a user would be able to obtain a periodical listed in any of these indices.

THESE ARE NOT TO BE CONSIDERED AS "RECOMMENDED" PERIODICALS IN ANY SENSE. They are merely a random sample of periodicals which are indexed. We expect that your library will own only a portion of those listed.

The titles are arranged alphabetically under the name of the index in which they appear.

---

[1] Altman and others. A Data Gathering Instructional Manual for Performance Measures in Public Libraries. Chicago, Celadon Press, 1976.

## DATA GATHERING

Step 1:

Make a copy of Periodical Availability Sample: Form 1 and Periodical Availability Sample: Form 2. Record all information on these copies.

Step 2:

On Periodical Availability: Form 1, place a checkmark beside the titles that your library currently receives as indicated by your central serials' record. If you no longer subscribe, do not check that title as being owned. However, if a title has ceased publication and you received the last issue, you are to check that title.

## TABULATION:

Step 1:

Count the number of periodicals owned from each index.

(1) Record these figures on Periodical Availability Sample: Form 2.

Step 2:

To determine the probability that a user could obtain from your library a periodical listed in one of these indices, divide the number owned in each index by 40.

Example: If your library owns 10 of the periodical titles in one index, 10/40 = 0.25. Thus a user has 2.5 chances in 10 of finding any periodical listed in that index, in your library.

Step 3:

Enter these quotients on Periodical Availability Sample: Form 2

Step 4:

In order to determine the overall probability that a user will be able to obtain a periodical listed in these indices from your library, add up the number of periodical titles owned.

(1) Divide this total by 320 (the number of titles listed).

(2) Record this probability on Periodical Availability Sample: Form 2.

77

## PERIODICAL AVAILABILITY SAMPLE: FORM 1

Name of Library: ______________________________________

**Applied Science and Technology Index**

| Periodical Title | Owned |
|---|---|
| Air Pollution Control Association Journal | |
| American Concrete Institute Journal | |
| American Dyestuff Reporter | |
| American Journal of Physics | |
| American Machinist | |
| Applied Physics | |
| Architectural Forum | |
| Architectural Record | |
| Canadian Chemical Processing | |
| Ceramic Industry | |
| Combustion | |
| Corrosion | |
| Diesal Equipment Superintendent | |
| Electronics | |
| Electronics & Power incorporting IEE News | |
| Engineer | |
| Heating, Piping & Air Conditioning | |
| ISA Transactions | |
| Instrumentation | |
| Journal of Engineering, Materials & Technology | |
| Journal of Environmental Sciences | |
| Journal of Geology | |
| Journal of Metals | |
| Light Metal Age | |
| Lubrication Engineering | |
| Machinery | |
| Mathematics of Computation | |
| Metal Progress | |
| Metallurgia and Metal Forming | |
| Mining Engineering | |
| Modern Materials Handling | |
| Nuclear Engineering International | |
| Petroleum Engineering International | |
| Pit & Quarry | |
| Power Engineering | |
| Product Engineering | |
| SIAM Journal on Applied Mathematics | |
| SIAM Journal on Control | |
| Soap/Cosmetics/Chemical Specialties | |
| Welding Journal | |

## PERIODICAL AVAILABILITY SAMPLE: FORM 1

Name of Library: ______________________________

### Art Index

| Periodical Title | Owned |
|---|---|
| Albright-Knox Art Gallery, Gallery Notes | |
| American Art Journal | |
| Architectural Record | |
| Architecture Canada | |
| Archivo Espanol de Arte | |
| Art and Artists | |
| Artforum | |
| Artscanada | |
| Bollettino d'Arte | |
| Boston Museum Bulletin | |
| Brussels. Musees Royaux des Beaux-Arts de Bel. | |
| Bulletin Monumental | |
| Casabella: Rivista de Architecture e Urbanis | |
| Craft Horizons | |
| Detroit Institute of Arts Bulletin | |
| Films in Review | |
| Gesta; International Center of Medieval Arts | |
| Goya; Revista de Arte | |
| Handweaver and Craftsman | |
| Interior Design | |
| Iranica Antigua | |
| Jahrbuch der Berliner Musein | |
| Jahrbuch der Hamberger Kunstsammlungen | |
| Jahrbuch des Duetschen Archaologischen Instituts | |
| Metropolitan Museum Journal | |
| The Metropolitan Museum of Art Bulletin | |
| Munchner Jahrbuch der Bildenden Kunst | |
| The Museum | |
| Oberlin College. Allen Memorial Art Museum Bull. | |
| Pantheon. Internationale Zeitschrift fur Kunst | |
| Perspecta; the Yale Architectural Journal | |
| Philadelphia Museum of Art. Bulletin | |
| Progressive Architecture | |
| Revue Archeologique | |
| La Revue de Louvre et des Musee de France | |
| Royal Town Planning Institute, Journal | |
| Sculpture International | |
| Studio International | |
| XX Siecle | |
| Werk | |

## PERIODICAL AVAILABILITY SAMPLE: FORM 1

Name of Library: ______________________________

### **Biological and Agricultural Index**

| Periodical Title | Owned |
|---|---|
| Acad. of Sciences of USSR Proceed., Bio. Sci. Sec. | |
| Ag Chem & Commerical Fertilizer | |
| Agricultural Engineering | |
| Agricultural Science Review | |
| American Journal of Botany | |
| American Journal of Veterinary Research | |
| American Zoologist | |
| Arnold Arboretum Journal | |
| Australian Journal of Biological Sciences | |
| Biological Reviews of Cambridge Philos. Soc. | |
| Biometrika | |
| Botanical Gazette | |
| The British Mycological Society Transactions | |
| Canadian Journal of Soil Science | |
| Cereal Chemistry | |
| The Cornell Veterinarian | |
| Dairy Herd Management | |
| Ecology | |
| Extension Service Review | |
| The Garden Journal | |
| Hilgardia (A Journal of Agricultural Science) | |
| Horticultural Research | |
| Journal of Applied Bacteriology | |
| Journal of Cell Biology | |
| Journal of Economic Entomology | |
| Journal of Experimental Marine Biology & Ecology | |
| Journal of Food Science | |
| Journal of Forestry | |
| Journal of Range Management | |
| Journal of the History of Biology | |
| Lloydia | |
| Marine Biological Assc. of the U.K. Journal | |
| Nutrition Reviews | |
| Physiological Zoology | |
| Plant & Soil | |
| Rural Sociology | |
| Systematic Zoology | |
| Tropical Science | |
| Water Research | |
| Western Horseman | |

## PERIODICAL AVAILABILITY SAMPLE: FORM 1

Name of Library: ______________________________

### Business Periodicals Index

| Periodical Title | Owned |
|---|---|
| The Accounting Review | |
| Administrative Management | |
| Administrative Science Quarterly | |
| Advertising Age | |
| Aviation Week & Space Technology | |
| The Bankers Magazine | |
| Best's Review, Life/Health Insurance Edition | |
| Broadcasting | |
| Chain Store Age Executive Edition | |
| Columbia Journal of World Business | |
| Construction Review | |
| Drug & Cosmetic Industry | |
| Fleet Owner | |
| Forbes | |
| Graphic Arts Monthly and The Printing Industry | |
| House & Home | |
| Industrial Distribution | |
| Industrial Research | |
| Industry Week | |
| International Labor Review | |
| Journal of Accounting Research | |
| Journal of Advertising Research | |
| Journal of Business (Univ. of Chicago) | |
| Journal of Systems Management | |
| Land Economics | |
| Management Accounting | |
| Management Review | |
| Merchandising Week | |
| Michigan Business Review | |
| Nation's Business | |
| Organization for Econ. Coop. and Devel. Observer | |
| Personnel | |
| Personnel Journal | |
| Personnel Management | |
| Pipeline & Gas Journal | |
| Publishers Weekly | |
| The Review of Economics & Statistics | |
| Sales Management: The Marketing Magazine | |
| Sloan Management Review | |
| Transportation Journal | |

## PERIODICAL AVAILABILITY SAMPLE: FORM 1

Name of Library:________________________________

### Education Index

| Periodical Title | Owned |
|---|---|
| AV Guide | |
| Adolescence | |
| The Agricultural Education Magazine | |
| The Am. Assoc. of Colls. for Teacher Ed. Yrbk. | |
| Art Education | |
| Arts & Activities | |
| The British Journal of Educational Psychology | |
| British Journal of Educational Studies | |
| College & University Business | |
| College & University Journal | |
| College Management | |
| Education | |
| Education and Psychological Measurement | |
| Educational Broadcasting International | |
| Educational Horizons | |
| Educational Review (British) | |
| Elementary English | |
| Harvard Educational Review | |
| Instructor | |
| Intellect | |
| The Journal of Aesthetic Education | |
| Journal of Chemical Education | |
| Journal of College Placement | |
| Journal of Educational Psychology | |
| The Journal of Experimental Education | |
| Journal of Home Economics | |
| Journal of Reading | |
| The Journal of the Nat'l. Assc. of Col. Admis. Coun. | |
| Measurement & Evaluation in Guidance | |
| Media & Methods | |
| Merrill-Palmer Quarterly | |
| The Modern Language Journal | |
| NASSP Bulletin | |
| Nat'l. Society for the Study of Education Ybk. | |
| School Review | |
| School Shop | |
| Speech Monographs | |
| The Times (London) Educational Supplement | |
| The Training School Bulletin | |
| Urban Education | |

## PERIODICAL AVAILABILITY SAMPLE: FORM 1

Name of Library:________________________________________

### Public Affairs Information Service

| Periodical Title | Owned |
|---|---|
| ABCA (Am. Bus. Communications Assc.) Bulletin | |
| African Review | |
| Air University Review | |
| American Economic Review | |
| Asian Outlook | |
| Business in Nebraska | |
| California Journal | |
| Canadian Slavonic Papers | |
| Civilisations (Belgium) | |
| Discount Merchandiser | |
| Economic Council Letter | |
| Federal Reserve Dallas. Business Review | |
| France Actuelle | |
| Georgetown Law Journal | |
| German Economic Review | |
| ICFTU Economic & Social Bulletin | |
| Industrial Relations | |
| International Canada | |
| Japan Quarterly | |
| Johns Hopkins Magazine | |
| Journal of Administration Overseas | |
| Journal of Agricultural Economics | |
| Journal of Asian Studies | |
| The Journal of Negro Education | |
| Journal of Risk and Insurance | |
| Kentucky Law Journal | |
| Liberation | |
| Local Government Finance | |
| Management Decision | |
| Modern Age | |
| Pakistan Development Review | |
| Popular Government | |
| Public Finance Quarterly | |
| Social Science Quarterly | |
| Soviet Studies | |
| Tennessee Planner | |
| Virginia Law Review | |
| War/Peace Report | |
| Welfare in Review | |
| YWCA Magazine | |

## PERIODICAL AVAILABILITY SAMPLE: FORM 1

Name of Library: ____________________

### Readers' Guide

| Periodical Title | Owned |
|---|---|
| Aging | |
| Art News | |
| Better Homes & Gardens | |
| Bulletin of the Atomic Scientists | |
| Chemistry | |
| Design | |
| Field & Stream | |
| Film Quarterly | |
| Foreign Affairs | |
| Fortune | |
| Good Housekeeping | |
| Harvest Years/Retirement Living | |
| High Fidelity | |
| Horticulture | |
| Hot Rod | |
| House & Garden | |
| Mechanix Illustrated | |
| Modern Photography | |
| Monthly Labor Review | |
| Musical Quarterly | |
| Nation | |
| National Review | |
| Natural History | |
| New Catholic World | |
| Newsweek | |
| PTA Magazine | |
| Parks & Recreation | |
| Poetry | |
| Popular Electronics | |
| Redbook | |
| Saturday Review | |
| Saturday Review of Education | |
| School and Society | |
| School Arts | |
| Society | |
| Travel | |
| UN Monthly Chronicle | |
| Weatherwise | |
| Wilson Library Journal | |
| Writer | |

## PERIODICAL AVAILABILITY SAMPLE: FORM 1

Name of Library: ______________________________

### Social Sciences Index

(Formerly: Social Sciences and Humanities Index)

| Periodical Title | Owned |
|---|---|
| Adolesence | |
| American Journal of Nursing | |
| Anthropos | |
| British Journal of Political Science | |
| Brookings Papers on Economic Activity | |
| Canadian Journal of Political Science | |
| Caribbean Studies | |
| Criminology | |
| Economic History Review | |
| Economic Inquiry | |
| Education and Urban Society | |
| Ethnic Studies | |
| Federal Probation | |
| Human Relations | |
| Indian Historian | |
| International Economic Review | |
| International Journal of Comparative Sociology | |
| International Journal of Social Psychiatry | |
| International Organization | |
| International Social Science Journal | |
| Jewish Social Studies | |
| Journal of Abnormal Psychology | |
| Journal of Counseling Psychology | |
| Journal of Creative Behaviour | |
| Journal of Interamer Studies and World Affairs | |
| Journal of International Affairs | |
| Manchester School of Economics and Social Studies | |
| Middle East Journal | |
| Middle Eastern Studies | |
| Nursing Outlook | |
| Oceans | |
| Politics and Society | |
| Psychiatry | |
| Public Administration Review | |
| Review of Black Political Economy | |
| Round Table | |
| Simulation and Society | |
| Social Biology | |
| Social Thought and Practice | |
| Urban Affairs Quarterly | |

# PERIODICAL AVAILABILITY SAMPLE: FORM 2

Name of Library: ______________________________

| INDEX | TITLES OWNED DIVIDED BY | = | PROBABILITY OF AVAILABILITY |
|---|---|---|---|
| Applied Science and Technology Index | ________/40 | = | __________ |
| Art Index | ________/40 | = | __________ |
| Biological and Agricultural Index | ________/40 | = | __________ |
| Business Periodicals Index | ________/40 | = | __________ |
| Education Index | ________/40 | = | __________ |
| Public Affairs Information Service | ________/40 | = | __________ |
| Readers' Guide | ________/40 | = | __________ |
| Social Sciences Index | ________/40 | = | __________ |
| TOTAL | ________/320 | = | __________ |

## SECTION 5:

## REFERENCE TITLE OWNERSHIP SAMPLE

The "Reference Title Ownership Sample" will provide information about how your library's reference book collection compares with a standard list of published reference titles. It will estimate the probability that a reference title of a certain subject class is owned by your library, and will also measure the recency of the titles that are owned.

Because of its major responsibilities to provide information and materials for professionals, businessmen, government agencies and other technical users, the Hawaii State Library Resource Center will use a different sample of reference book titles to assess its reference collection. Instructions for the Hawaii State Library Resource Center are provided in a later part of this section. All other libraries are to use the instructions provided below.

## Instructions for All Libraries Except the HSL Resource Center

### PREPARATION OF THE LIST OF REFERENCE TITLES

To assess your reference collection, you will be checking your holdings against all 770 reference titles listed in the American Library Association's Reference Books for Small and Medium-Sized Libraries.[1]

Obtain or make a copy of Reference Books for Small and Medium-Sized Libraries that you can mark up. You may:

(a) Purchase a copy of that book especially for the purpose of conducting this measurement of your reference collection. Do not use a copy that is a part of your current library collection.

(b) Or, you may use a copy machine to make a copy that you can mark on. You should copy pages 1 to 116 in the book.

### DATA COLLECTION

Step 1:

Start with the first reference title listed on page 1 of your copy of Reference Books for Small and Medium-Sized Libraries. Check the card catalogue of your library to see whether that title is owned by your library. If that title is owned, place a checkmark beside it on your copy of Reference Books.

---

[1] American Library Association. Reference Books Review Committee. Reference Books for Small and Medium-Sized Libraries. Second Edition, revised: Chicago, 1973.

Step 2:

If that title is owned, check the card catalogue entry to see whether the publication date of the owned title is as recent as the publication date of the title listed in your copy of Reference Books.

If the owned title is as recent as the same title listed in Reference Books, circle the publication date for that title in your copy of Reference Books.

Step 3:

Continue Steps 1 and 2 for each of the 770 titles listed in your copy of Reference Books.

## TALLYING THE DATA

The results of your data collection will be recorded on Reference Title Ownership Sample: Form 1.

Step 1:

Using a copy machine, make a copy of Reference Title Ownership Sample: Form 1. Use this copy for recording.

Step 2:

Tally the results for the first subject matter category listed in your copy of Reference Books, which is "Bibliographic and General Works" on pages 1 through 8 of your copy:

(a) Count the total number of titles checked in that section of your copy, and record this number in the third column of the appropriate row on Reference Title Ownership Sample: Form 1.

(b) Count the total number of publication dates which are circled in that section of your copy, and record this number in the fourth column of the appropriate row on Reference Title Ownership Sample: Form 1.

Step 3:

Repeat Step 2 for each of the remaining 16 subject matter categories listed in your copy of Reference Books.

Step 4:

Add up all the entries in Columns 3 and 4 of Reference Title Ownership Sample: Form 1 and record the totals for those columns at the bottom.

## TABULATING THE DATA

Step 1:

Divide each entry in Column 3 of Reference Title Ownership Sample: Form 1 by the corresponding number in Column 2, and record the result in Column 5. The result should be calculated to two decimal places.

Step 2:

Divide each entry in Column 4 by the corresponding entry in Column 3, and record the result in Column 6.

## REFERENCE TITLE OWNERSHIP SAMPLE: FORM 1

Name of Library: ________________________

| Reference book category | Number | No. owned (checked) | No. owned recent ed. (pub. date circled) | Probability of ownership* | Proportion of owned which are recent ed.** |
|---|---|---|---|---|---|
| Bibliographic and General Works | 46 | | | | |
| Encyclopedias | 11 | | | | |
| Philosophy and Religion | 43 | | | | |
| Psychology | 10 | | | | |
| Business & Economics | 41 | | | | |
| Social Sciences | 75 | | | | |
| Education | 39 | | | | |
| Science & Technology | 100 | | | | |
| Art | 64 | | | | |
| Music | 25 | | | | |
| Cinema, Dance and Theater | 27 | | | | |
| Games, Sports and Hobbies | 19 | | | | |
| Language | 52 | | | | |
| Literature | 67 | | | | |
| Geography, Travel and Archaeology | 24 | | | | |
| History | 53 | | | | |
| Biography, Genealogy and Names | 74 | | | | |
| TOTAL | 770 | | | | |

*Column "3" divided by Column "2"

**Column "4" divided by Column "3"

## Instructions for the Hawaii State Library Resource Center

### PREPARATION OF THE LIST OF REFERENCE TITLES

To assess your reference collection, you will be checking your holdings against a sample of reference titles drawn from Sheehy, Guide to Reference Books.[1] There are 48 general subject matter categories in Guide to Reference Books, ranging from AA--Bibliography to EL--Agricultural Sciences.

### SELECTION OF THE SAMPLE

The sample will consist of reference titles on one out of every five pages of Guide to Reference Books.

Step 1:

Using the table of random numbers provided in Section 2 of this manual, select a random number between 1 and 5.

Step 2:

Starting with the page of Guide to Reference Books that is equal to the random number you have selected, make a Xerox copy of every fifth page in the Guide. (For example, if the random number you have selected is 2, then you would make a Xerox copy of pages 2, 7, 12, 17, 22, 27, 32, etc.)

The pages you have copied constitute the sample of reference book titles you will be using. You will have a total of approximately 166 pages in your sample, which will contain about 2,100 reference titles.

### DATA COLLECTION

Step 1:

Start with the first reference title on the pages you copied from Guide to Reference Books. Look up that title in the card catalogue to see whether that title is owned by your library. If it is, place a check beside that title.

---

[1] Eugene Paul Sheehy. Guide to Reference Books. Ninth Edition, Chicago: American Library Association, 1976.

Step 2:

If that title is owned, check the card catalogue entry to see whether the publication date of the owned title is as recent as as the publication date of the title listed in your copy of Guide to Reference Books.

If the owned title is as recent as the title listed in the sample, circle the publication date for that title in your copy of Guide to Reference Books.

Step 3:

Continue Steps 1 and 2 for each of the titles in your sample.

## TALLYING THE DATA

The results of your data collection will be recorded on Reference Title Ownership Sample: Form 2.

Step 1:

Using a copy machine, make a copy of Reference Title Ownership Sample: Form 2. Use this copy for recording.

Step 2:

Tally the results for the first subject matter category, which is "Bibliography."

(a) Count the total number of titles listed in that section of your copy of Guide to Reference Books, and record this number in the appropriate row on Reference Title Ownership Sample: Form 2.

(b) Count the total number of titles checked in that section of your copy, and record this number in the third column of the appropriate row on Reference Title Ownership Sample: Form 2.

(c) Count the total number of publication dates which are circled in that section of your copy, and record this number in the fourth column of the appropriate row on Reference Title Ownership Sample: Form 2.

Step 3:

Repeat Step 2 for each of the remaining 47 subject matter categories on the pages you copied from Guide to Reference Books.

Step 4:

Add up all the entries in Columns 2, 3, and 4 of Reference Title Ownership Sample: Form 2 and record the totals for those columns at the bottom.

## TABULATING THE DATA

Step 1:

Divide each entry in Column 3 of Reference Title Ownership Sample: Form 2 by the corresponding number in Column 2, and record the result in Column 5. The result should be calculated to two decimal places.

Step 2:

Divide each entry in Column 4 by the corresponding entry in Column 3, and record the result in Column 6.

94

## REFRENCE TITLE OWNERSHIP SAMPLE: FORM 2

(Hawaii State Library Resource Center)

| Reference book category | No. of titles in sample | No. owned (checked) | No. owned recent ed. (pub. date circled) | Proba-bility of ownership* | Proportion which are recent edition |
|---|---|---|---|---|---|
| AA Bibliography | | | | | |
| AB Librarianship and Lib. Resources | | | | | |
| AC Encyclopedias | | | | | |
| AD Language Dictionaries | | | | | |
| AE Periodicals | | | | | |
| AF Newspapers | | | | | |
| AG Government Publications | | | | | |
| AH Dissertations | | | | | |
| AJ Biography | | | | | |
| AK Genealogy | | | | | |
| BA Philosophy | | | | | |
| BB Religion | | | | | |
| BC Linguistics and Philology | | | | | |
| BD Literature | | | | | |
| BE Fine Arts | | | | | |
| BF Applied Arts | | | | | |
| BG Theater Arts | | | | | |
| BH Music | | | | | |
| CA General Works (Social Sciences) | | | | | |
| CB Education | | | | | |
| CC Sociology | | | | | |
| CD Anthropology and Ethnology | | | | | |
| CE Mythology | | | | | |
| CF Folklore and Popular Customs | | | | | |
| CG Statistics | | | | | |
| CH Economics | | | | | |
| CJ Political Science | | | | | |
| CK Law | | | | | |
| CL Geography | | | | | |
| DA General History | | | | | |
| DB The Americas | | | | | |
| DC Europe | | | | | |
| DD Africa | | | | | |
| DE Asia | | | | | |
| DF Australia and New Zealand | | | | | |
| DG Oceania | | | | | |
| DH Arctic and Antarctic | | | | | |
| EA General Works | | | | | |
| EB Astronomy | | | | | |
| EC Biological Sciences | | | | | |
| ED Chemistry | | | | | |
| EE Earth Sciences | | | | | |
| EF Mathematics | | | | | |
| EG Physics | | | | | |
| EH Psychology and Psychiatry | | | | | |
| EJ Engineering | | | | | |
| EK Medical Sciences | | | | | |
| EL Agricultural Sciences | | | | | |
| TOTAL | | | | | |

*Column "3" divided by Column "2"
**Column "4" divided by Column "3"

## SECTION 6:

## LIBRARY USER SAMPLE

The "Library User Sample" will collect information from each person entering your library on the days being monitored. This procedure will describe users in terms of purpose of visit, student status, sex and satisfaction with various aspects of the library. It also provides measures of library entry and departure which will determine peak-usage periods.

It is recommended that this monitoring take place during several days of full library operation. If you already have some idea of the number of people who use your library in a typical day, conduct the monitoring over a period of days that will yield information for between 600 and 1,000 library users. If three or more monitoring days are used, make sure one of them is a Saturday.

The information that you collect will be tabluated for you through computer processing. The Office of Library Services will receive the data and will send you tabulated results.

## PRELIMINARY PREPARATION

In order to complete this procedure, it will be necessary for you to have certain items prepared in advance: Library user tickets for persons entering the building and signs in large type placed outside of each entrance informing patrons that a survey is in progress.

For the signs, we suggest the following wording:

> THE LIBRARY IS CONDUCTING A SURVEY TODAY. PLEASE
> TAKE A TICKET AND RETURN IT AS YOU LEAVE THE BUILDING.
> THANK YOU.

Another sign should be placed at each exit as a reminder to turn in the tickets. For example:

> PLEASE RETURN YOUR SURVEY TICKET. THANK YOU.

A copy of the library user ticket is shown on the next page. You will need to have the tickets printed well ahead of the monitoring period. The number of tickets to be printed depends on the size of your library and the number of days to be monitored.

## DATA GATHERING

### Step 1: Preliminary Preparation

(a) Number each ticket on the back with a pen or numbering machine. This will allow you to know exactly how many have been distributed.

(b) Put up the signs.

# LIBRARY USER SAMPLE: FORM 1

## Questionnaire

A.

1____ Male 2____ Female

B. MAIN PURPOSE OF THIS VISIT
(PLEASE CHECK ONE)

1. ____ Personal
2. ____ For School
3. ____ For Club or Organization
4. ____ For Work -- Private Occupation or Profession
5. ____ For Work -- Govn't Agency
6. ____ Other (specify)
(specify)________________

C. IF YOU ARE NOW A STUDENT
PLEASE CHECK BELOW

1.____ Part Time 2.____ Full Time

1.____ Nursery 4.____H.S.(10-12)
2.____ Elem(K-6) 5.____College
3.____ Jr. High(7-9) 6.____P.Grad.
7.____Technical/Vocational
8.____Other (specify)

D. Did you ask a staff member for help today?

1.____ Yes 2.____No

E. Did you obtain the library material you wanted today?

1.___Yes 2.___ No 3.___ Partially

If not, why not?

F. Did you receive the library service you expected today?

1.___Yes 2.___ No 3.___ Partially

If not, why not?

(For further comments, use other side)

PLEASE RETURN TICKET
AS YOU LEAVE LIBRARY

THANK YOU!

| Staff Use Only | |
|---|---|
| 9:00 | 1 |
| :15 | 2 |
| :30 | 3 |
| :45 | 4 |
| 10:00 | 5 |
| :15 | 6 |
| :30 | 7 |
| :45 | 8 |
| 11:00 | 9 |
| :15 | 10 |
| :30 | 11 |
| :45 | 12 |
| 12:00 | 13 |
| :15 | 14 |
| :30 | 15 |
| :45 | 16 |
| 1:00 | 17 |
| :15 | 18 |
| :30 | 19 |
| :45 | 20 |
| 2:00 | 21 |
| :15 | 22 |
| :30 | 23 |
| :45 | 24 |
| 3:00 | 25 |
| :15 | 26 |
| :30 | 27 |
| :45 | 28 |
| 4:00 | 29 |
| :15 | 30 |
| :30 | 31 |
| :45 | 32 |
| 5:00 | 33 |
| :15 | 34 |
| :30 | 35 |
| :45 | 36 |
| 6:00 | 37 |
| :15 | 38 |
| :30 | 39 |
| :45 | 40 |
| 7:00 | 41 |
| :15 | 42 |
| :30 | 43 |
| :45 | 44 |
| 8:00 | 45 |
| :15 | 46 |
| :30 | 47 |
| :45 | 48 |
| 9:00 | 49 |
| :15 | 50 |
| :30 | 51 |
| :45 | 52 |

Step 2: Distributing Tickets

(a) Station a person at each entrance and exit for the entire sampling period.

(b) Give a ticket to each person entering the building, except library employees and delivery persons.

  (1) Small children who come with adults should be included. Give the child's ticket to the accompanying adult.

  (2) For school groups, ask the accompanying teacher for the number of boys and girls and the grade level. Fill out a ticket for each student.

(c) If a person uses the library more than once within the same day, he is to be given a ticket for each visit.

Step 3: Marking Arrival Time

(a) Each ticket has a time chart divided into 15-minute intervals.

(b) Note in which of the 15-minute intervals each person arrives by drawing a line with a red pen, not felt tipped, in the appropriate box. For example, if someone enters at 7:50, put a line between 7:45 and 8:00.

(c) Ask the patron to complete the ticket and return it when he/she leaves the buildings.

(d) For those persons who refuse tickets, the monitor should fill out the ticket, write a brief description of the person, such as: "Old lady with shopping bag," and hold the ticket until the person leaves. The monitor should then record the departure time on the ticket.

Step 4: Marking Departure Time

(a) Tickets are to be collected from everyone exiting and the time of departure noted by drawing a line through the appropriate 15-minute interval.

(b) For those persons who arrive and leave within the same 15 minutes, draw an 'X' through that segment.

(c) If someone has mislaid the ticket, ask if he/she remembers his/her arrival time.

  (1) Take another ticket and record the estimated arrival and departure times.

  (2) If he/she cannot remember, note only the departure time on another ticket and write 'D' beside this time.

## TRANSFER OF TICKET INFORMATION TO CODING SHEETS

Next, you will be transferring the information recorded on the user tickets to coding sheets, which will be submitted to the Office of Library Services for data processing.

### Step 1: Preparation of Coding Sheets

(a) Using a copy machine, make one copy of Library User Sample: Form 2. In Columns 23 and 24 of every row of that copy, record your library budget code number, which can be found on page 8 of this manual.

Finally, record the name of your library in the upper left hand corner of that copy.

(b) Next, using the copy machine again, make a sufficient number of copies of that copy of Library User Sample: Form 2. Use the following formula:

number copies = number tickets/20 + 1

You will be recording information from the user tickets onto the Library User Sample: Form 2 coding sheets.

### Step 2: Recording Onto Coding Sheets

Following the coding guide given in "Library User Sample: Coding for Form 2," transfer the information from each user ticket onto a line of Library User Sample: Form 2. Obtain the "library user identification number" for Columns 1 through 4 of the coding sheet from the back of the user ticket.

### Step 3: Submission of Information

Send the completed Library User Sample: Form 2 coding sheets to the Office of Library Services. They will have the information tabulated by computer and will return the results to you.

LIBRARY USER SAMPLE:  CODING FOR FORM 2

| coding sheet column(s): | code: | code values: |
|---|---|---|
| 1-4 | Library user identification number | Sequence number of library user surveyed<br>Note:  Identification numbers which are less than four digits must have zeros (0's) placed in front of them.  For example, number "23" would be recorded as "0023" |
| 6 | user sex code | 1 = male<br>2 = female |
| 7 | purpose of visit code | 1 = personal<br>2 = for school<br>3 = for club or organization<br>4 = for work--private occupation or profession<br>5 = for work--government agency<br>6 = other |
| 8 | student status code | 1 = part time<br>2 = full time<br>3 = neither one checked |
| 9 | school level code | 1 = Nursery<br>2 = Elem. (K-6)<br>3 = Jr. High (7-9)<br>4 = H.S. (10-12)<br>5 = College<br>6 = P. Grad.<br>7 = Technical/Vocational<br>8 = other<br>Note:  If user is neither a part time nor a full time student, do not record anything in column 9 |

## LIBRARY USER SAMPLE: CODING FOR FORM 2 (CONTINUED)

| coding sheet column(s): | code: | code values: |
|---|---|---|
| 10 | staff assistance requested code | 1 = yes<br>2 = no |
| 11 | obtained library material code | 1 = yes<br>2 = no<br>3 = partially |
| 12 | received library service code | 1 = yes<br>2 = no<br>3 = partially |
| 13-14 | time of arrival code | Record the first number checked at the right hand side of the library user ticket<br>Note: If a single digit number is checked, it must be preceded by a zero (0). For example, a "1" would be recorded as "01" |
| 15-16 | total time spent code | Subtract the second number checked at the right hand side of the library user ticket from the first number checked, and record this remainder on the coding sheet<br>Note: If the remainder after subtraction is a single digit number, it must be preceded by a zero (0) when it is recorded |
| 23-24 | library code | Code number for your library. See page 8 of this manual |

## Coding Sheet

Sheet no. ____

Name of Library: ______________________________

Number of days survey conducted ____

| library user identification number | | | | | sex | purpose of visit | student status | school level | staff assistance | obtained material | received service | time of arrival | | total time spent | | | | | | | | library code | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

# SECTION 7:

# IN-LIBRARY CIRCULATION SAMPLE

The "In-Library Circulation Sample" will provide measures of what types of materials and items are most used by patrons in your library. This information is an important supplement to other measures concerned with what materials are borrowed for use outside of the library.

The sample provides an estimate based on hourly counts of the types of items used by patrons. This measure gives an approximation of both the form and frequency of materials being used, together with the proportion of in-library circulation represented by each type. Measurement for the Hawaii State Library will include a monitoring of materials used within each department.

It is recommended that the sampling of in-library materials take place over the period of at least three days of library operations.

Instructions for the Hawaii State Library are provided in a later part of this section. All other libraries are to use the instructions provided below.

## Instructions for All Libraries Except the Hawaii State Library

### DATA GATHERING

Step 1:

Shelvers and pages must be informed in advance that, until the analysis is completed, no items used within the library on the monitored day are to be reshelved. Also, signs should be conspicuously placed asking patrons not to reshelve materials. We suggest the sign read:

> THE LIBRARY IS TAKING A SURVEY. PLEASE DO NOT
> RETURN MATERIALS TO THE SHELVES.

It is acceptable to move books from table tops to make space, if necessary, provided that the information needed for each item is recorded before reshelving. No item is to be returned to its shelf location until full information has been taken. It is not necessary to reshelve all these materials at that time, but they should be set aside to prevent being counted again.

Step 2:

Using a copy machine, make a copy of In-Library Circulation: Form 1. Use this copy to record tallies and tabulations.

Step 3:

Every hour on the half hour during each survey day, gather up all materials lying on tables, desks, trucks, etc. -- in other words, all materials which are not in their proper places. It is not necessary to record materials actually being used by patrons. Such items will be recorded in the next count.

Step 4:

For each item, place a '1' in the appropriate "Type of Material" row under the correct time column, on In-Library Circulation: Form 1. (If the item used does not fit any of the named categories, place it in "Other.")

## TABULATION

Step 1:

Add each vertical column on In-Library Circulation: Form 1 to find total items in use during that hour during the survey period.

Step 2:

Add each horizontal row on the form to find the total number of instances of use of each type of item during the survey period.

Step 3:

Divide each entry in the "Total" column by the number of survey days (a) and record the result in the corresponding space in the "Ave. Day" column.

Step 4:

Divide each entry in the "Total" column by the number at the bottom (b), multiply by 100 and record the result in the corresponding space in the "%" column at the right. Calculate each result to the nearest 1%.

## IN-LIBRARY CIRCULATION SAMPLE: FORM 1

Name of Library: ____________________ No. of Survey Days: (a) ____________________

| Type of Material | 9:30 | 10:30 | 11:30 | 12:30 | 1:30 | 2:30 | 3:30 | 4:30 | 5:30 | 6:30 | 7:30 | 8:30 | 9:30 | Total | Ave. Day* | %** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Reference | | | | | | | | | | | | | | | | |
| Fiction | | | | | | | | | | | | | | | | |
| Non-Fiction | | | | | | | | | | | | | | | | |
| Periodical | | | | | | | | | | | | | | | | |
| Newspaper | | | | | | | | | | | | | | | | |
| Document | | | | | | | | | | | | | | | | |
| Telephone Book | | | | | | | | | | | | | | | | |
| Microfilm | | | | | | | | | | | | | | | | |
| Micro-card | | | | | | | | | | | | | | | | |
| Slide | | | | | | | | | | | | | | | | |
| Filmstrip | | | | | | | | | | | | | | | | |
| Audio Tape/ Cassette | | | | | | | | | | | | | | | | |
| Vertical File | | | | | | | | | | | | | | | | |
| Phono Record | | | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | (b) | | |

*"Total" Column divided by (a)
**"Total" Column divided by (b) times 100

# Instructions for the Hawaii State Library

## DATA GATHERING

### Step 1:

Shelvers and pages must be informed in advance that, until the analysis is completed, no items used within the library on the monitored day are to be reshelved. Also, signs should be conspicuously placed asking patrons not to reshelve materials. We suggest the sign read:

> THE LIBRARY IS TAKING A SURVEY. PLEASE DO NOT
> RETURN MATERIALS TO THE SHELVES.

It is acceptable to move books from table tops to make space, if necessary, provided that the information needed for each item is recorded before reshelving. No item is to be returned to its shelf location until full information has been taken. It is not necessary to reshelve all these materials at that time, but they should be set aside to prevent being counted again.

### Step 2:

Using a copy machine, make 13 copies of In-Library Circulation: Form 2: Distribute one of these copies to each library department or area mentioned in In-Library Circulation: Form 3. Each area or department will use its copy to record sample tallies for its location.

Each department or area is to follow the instructions given in Steps 3 and 4, below.

### Step 3:

Every hour on the half hour during each survey day, gather up all materials lying on tables, desks, trucks, etc. -- in other words, all materials which are not in their proper places. It is not necessary to record materials actually being used by patrons. Such items will be recorded in the next count.

### Step 4:

For each item, place a '1' in the appropriate "Type of Material" row under the correct time column, on In-Library Circulation: Form 2. (If the item used does not fit any of the named categories, place it in "Other.")

## TABULATION

Step 1:

Each area or department of the library should perform the following tabulations on its copy of In-Library Circulation: Form 2:

(a) Add each vertical column to find total items in use during that hour during the survey period.

(b) Add each horizontal row on the form to find the total number of instances of use of each type of item during the survey period.

Step 2:

Using a copy machine, make one copy each of In-Library Circulation: Form 3 and In-Library Circulation: Form 4. Record further tabulations on these copies.

Step 3:

Transfer the entries in the "Total" column on each department's In-Library Circulation: Form 2 to the appropriate column on In-Library Circulation: Form 3.

Step 4:

Add each horizontal row on In-Library Circulation: Form 3.

Step 5:

Divide each entry in the "Total" column on In-Library Circulation: Form 3 by the number of survey days (a) and record the result in the corresponding space in the "Ave. Day" column.

Step 6:

Divide each entry in each column of In-Library Circulation: Form 3 by the total at the bottom of that column, multiply by 100 and record the result in the corresponding space on In-Library Circulation: Form 4.

110

## IN-LIBRARY CIRCULATION SAMPLE: FORM 2
(Hawaii State Library)

Department:______________________________

| Type of Material | 9:30 | 10:30 | 11:30 | 12:30 | 1:30 | 2:30 | 3:30 | 4:30 | 5:30 | 6:30 | 7:30 | 8:30 | 9:30 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Reference | | | | | | | | | | | | | | |
| Fiction | | | | | | | | | | | | | | |
| Non-Fiction | | | | | | | | | | | | | | |
| Periodical | | | | | | | | | | | | | | |
| Newspaper | | | | | | | | | | | | | | |
| Document | | | | | | | | | | | | | | |
| Telephone Book | | | | | | | | | | | | | | |
| Microfilm | | | | | | | | | | | | | | |
| Micro-card | | | | | | | | | | | | | | |
| Slide | | | | | | | | | | | | | | |
| Filmstrip | | | | | | | | | | | | | | |
| Audio Tape/ Cassette | | | | | | | | | | | | | | |
| Vertical File | | | | | | | | | | | | | | |
| Phono Record | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | |

## IN-LIBRARY CIRCULATION SAMPLE: FORM 3
(Hawaii State Library)

No. of Survey Days: (a)______________________

| Type of Material | Names of Departments | | | | | | | | | | | | | Total | Ave. Day* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Bio | LLH | FIC | Haw. & Pac. | E.A. Room | Ref. | BST | Fed. | Fine Arts | SS & Phil. | Young Adult | Gdn. Court | Orient Books | | |
| Reference | | | | | | | | | | | | | | | |
| Fiction | | | | | | | | | | | | | | | |
| Non-Fiction | | | | | | | | | | | | | | | |
| Periodical | | | | | | | | | | | | | | | |
| Newspaper | | | | | | | | | | | | | | | |
| Document | | | | | | | | | | | | | | | |
| Telephone Book | | | | | | | | | | | | | | | |
| Microfilm | | | | | | | | | | | | | | | |
| Micro-card | | | | | | | | | | | | | | | |
| Slide | | | | | | | | | | | | | | | |
| Filmstrip | | | | | | | | | | | | | | | |
| Audio Tape/ Cassette | | | | | | | | | | | | | | | |
| Vertical File | | | | | | | | | | | | | | | |
| Phono Record | | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | |

*"Total" Column divided by (a)

# IN-LIBRARY CIRCULATION SAMPLE: FORM 4
(Hawaii State Library)

| Type of Material | Names of Departments | | | | | | | | | | | | | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Bio. | LLH | FIC | Haw. & Pac. | E.A. Room | Ref. | BST | Fed. | Fine Arts | SS & Phil. | Young Adult | Gdn. Court | Orient Books | |
| Reference | | | | | | | | | | | | | | |
| Fiction | | | | | | | | | | | | | | |
| Non-Fiction | | | | | | | | | | | | | | |
| Periodical | | | | | | | | | | | | | | |
| Newspaper | | | | | | | | | | | | | | |
| Document | | | | | | | | | | | | | | |
| Telephone Book | | | | | | | | | | | | | | |
| Microfilm | | | | | | | | | | | | | | |
| Micro-card | | | | | | | | | | | | | | |
| Slide | | | | | | | | | | | | | | |
| Filmstrip | | | | | | | | | | | | | | |
| Audio Tape/ Cassette | | | | | | | | | | | | | | |
| Vertical File | | | | | | | | | | | | | | |
| Phono Record | | | | | | | | | | | | | | |
| Other | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | |

# SECTION 8:

# CIRCULATION DISTRIBUTION SAMPLE

The "Circulation Distribution Sample" will provide estimates of the types of different materials and books borrowed from your library by patrons, and the average number of items per patron borrowed.

Your main tasks will involve drawing, and collecting data about, a sample of circulating materials. You will also be tabulating results concerning types of materials borrowed. Information concerning types of books borrowed will be recorded on coding sheets and submitted to the Office of Library Services for processing.

## SELECTION OF THE SAMPLING PROCEDURE

It is assumed that charge slips for records and charge slips for all other materials (including books, pictures, pamphlets and paperbacks) are kept in two separate files. Therefore, a sample must be drawn from each file.

### Step 1: Selecting the Interval for Sampling

The sample should be selected from charge slips covering one week of library operation.

(a) Based on circulation logs, estimate the total number of charge slips (both regular charge slips and charge slips for records) recorded and filed during a week's time.

(b) Use the following formula to determine the sampling interval:

interval = 300/total charge slips in a week*

*both records and other materials

As an example, if the total charge slips for a week were 1,500, the interval would by 300/1,500 or 1 out of every five charge slips to be sampled.

This procedure is designed to produce a total sample of 300 charge slips. It is estimated that these slips would contain a total of more than 500 books borrowed from the library.

Note: This sampling interval is to be used for sampling both regular charge slips and charge slips for records.

### Step 2:

Select a starting point for the sample by using the Table of Random Numbers found in Section 2 of this manual. Go across the top row of numbers in that table until you come to the first number that is equal to or less than the sampling interval. (For example, if your interval is 1 out of 5, pick the first number that is equal to or less than 5.) Use this number as your starting point.

## DATA GATHERING

### Step 1: Preparation of Forms

(a) Using a copy machine, make one copy of Circulation Distribution Sample: Form 1. This will be used to keep track of numbers of borrowers and numbers of each type of material borrowed.

(b) Using a copy machine, make a sufficient number of copies of Circulation Distribution Sample: Form 2 to record information about books borrowed. Thirty copies should probably be sufficient.

### Step 2:

Starting with charge slips for the first day to be sampled, begin counting slips until you reach the number represented by the starting point you selected. (For example, if your starting point was 3, select the third charge slip you come to.)

### Step 3:

Record information about that charge slip on Circulation Distribution Sample: Form 1:

(a) Place one "hash mark" representing one borrower in the appropriate location in the column entitled "Borrower Count."

(b) Place a "hash mark" for each item borrowed by the borrower in the appropriate location in the column entitled "Item Count."

If any books have been borrowed, record the following information for each book on Circulation Distribution Sample: Form 2:*

(a) A sequential identification number for that book, in Column 1.

(b) Author's last name.

(c) Book title.

(d) Account Number (from the charge slip).

---

*Note: Sampling for the Hawaii State Library may omit use of Circulation Distribution Sample: Form 2 by simply pulling off and retaining one carbon copy of the charge slip being sampled.

Step 4:

Using the sampling interval, continue to the next charge slip to be sampled and repeat Step 3. Continue using the sampling interval until all charge slips (both regular charge slips and charge slips for records) for that day have been sampled.

Step 5:

For the next day's sample, repeat Steps 2 and 3. Continue until a week's charge slips have been sampled.

Step 6:

Look up each book listed on Circulation Distribution Sample: Form 2 in the card catalogue, and record the following information in Columns 5 and 6 of that form:*

(a) Complete call number including Cutter. If the title is a juvenile title, precede the call number with a J. If the title is fiction, precede it with an F. Juvenile fiction titles should be indicated by JF.

(b) Year of publication.

## TRANSFER OF INFORMATION ABOUT BORROWED BOOKS TO CODING SHEETS

Next, you will be transferring the information recorded on Circulation Distribution Sample: Form 2 to coding sheets, which will be submitted to the Office of Library Services for data processing.

### Step 1: Preparation of Coding Sheets

(a) Using a copy machine, make one copy of Circulation Distribution Sample: Form 3. In Columns 23 and 24 of every row of that copy, record your library budget code number, which can be found on page 8 of this manual.

Finally, record the name of your library in the upper left hand corner of that copy.

---

*Hawaii State Library: Record this information on the charge slip copy pulled from the file.

(b) Next, using the copy machine again, make a sufficient number of copies of that copy of Circulation Distribution Sample: Form 3. You will be recording information from Circulation Distribution Sample: Form 2 onto these copies.

Step 2: Recording Onto Coding Sheets

Following the coding guide given in "Circulation Distribution Sample: Coding for Form 3," copy the information from your Circulation Distribution Sample: Form 2 sheets onto the Circulation Distribution Sample: Form 3 coding sheets.

Step 3: Submission of Information

Send the completed Circulation Distribution Sample: Form 3 coding sheets to the Office of Library Services. They will have the information tabulated by computer and will return the results to you.

## TABULATION OF ITEM AND BORROWER COUNTS

Step 1:

Using a copy machine, make a copy of Circulation Distribution Sample: Form 4.

Step 2:

Record information from Circulation Distribution Sample: Form 1 on Circulation Distribution Sample: Form 4:

(a) Add up the total numbers of books, pictures, pamphlets, paperbacks, undetermined items and records borrowed, and record these numbers in Column 2, Part B on Form 4. Place the number of records borrowed in Column 3, Part A of Form 4.

(b) Add up the total number of persons who borrowed books, pictures, pamphlets, paperbacks or undertermined items, and record in Column 2, Part A on Form 4.

(c) Add up the total number of persons who borrowed records, and record in Column 2, Part A on Form 4.

Step 3:

(a) Add the numbers of books, pictures, pamphlets, paperbacks and undetermined items in Column 2, Part B of Form 4, and place this number in Column 3 of Part A.

(b) Calculate totals for Columns 2 and 3, Part A and Column 2, Part B.

(c) Divide entries in Column 3, Part A by entries in Column 2, Part A and place the results in Column 4 of Part A.

(d) Divide entries in Column 2 of Part B by the number of survey days (a) and record these results in Column 3 of Part B.

(e) Divide entries in Column 2, Part B by the total (b) and multiply by 100. Record the results in Column 4, Part B. Calculate results to the nearest 1%.

121

## CIRCULATION DISTRIBUTION SAMPLE: FORM 1

Name of Library:______________________ No. of Survey Days:____________________

| Type of Material | Borrower Count | Item Count |
|---|---|---|
| Books | | |
| Pictures | | |
| Pamphlets | | |
| Paperbacks | | |
| Undetermined | | |
| Records | | |

## CIRCULATION DISTRIBUTION SAMPLE: FORM 2

Name of Library:________________________

| Item No. | Author | Title | Account No. | Call No. | Year of Pub. |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

CIRCULATION DISTRIBUTION SAMPLE: CODING FOR FORM 3

| coding sheet column(s): | code: | code values: |
|---|---|---|
| 1-3 | item number | Sequence number of sample item<br>Note: Item numbers which are less than three digits must have zeros (0's) placed in front of them. For example, item number "23" would be recorded as "023" |
| 5 | book type | 1 = Adult fiction*<br>2 = Adult non-fiction<br>3 = Biography<br>4 = Juvenile fiction<br>5 = Juvenile non-fiction<br>6 = Hawaii & Pacific<br>7 = Foreign<br>8 = Not determined<br>*Includes mysteries, science fiction, and westerns |
| 6-7 | Dewey Decimal class | First two digits of Dewey Decimal number<br>Note: Record only for books that have a Dewey Decimal number |
| 9-10 | year of publication code | Last two digits of year of publication<br>For example, if the year of publication is 1972, the two digit code would be "72." If the book was published prior to 1901, use "01" as the code. If year not determined or no date, code as "99" |
| 23-24 | library code | Code number for your library. See page 8 of this manual |

# CIRCULATION DISTRIBUTION SAMPLE: FORM 3

**Name of Library:** ______________________________

| item number | | | | book type | Dewey Decimal class (1st 2 digits) | | | year of publication | | | | | | | | | | | | | | library code | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## CIRCULATION DISTRIBUTION SAMPLE: FORM 4

Name of Library:______________________ No. of Survey Days: (a)__________________

### PART A

| Type of Material | Total Number of Borrowers | Total Number of Items | Items per Borrower* |
|---|---|---|---|
| Books, Pictures, Pamphlets, Paperbacks, Undetermined | | | |
| Records | | | |
| TOTAL | | | |

*Column "3" divided by Column "2"

### PART B

| Type of Material | Total Number of Items | Number of Items - Average Day* | Percent** |
|---|---|---|---|
| Books | | | |
| Pictures | | | |
| Pamphlets | | | |
| Paperbacks | | | |
| Undetermined | | | |
| Records | | | |
| TOTAL | (b) | | |

*Column "2" divided by (a)
**Column "2" divided by (b) times 100

# SECTION 9:

# INTERLOAN REQUEST SAMPLE

The "Interloan Request Sample" will provide information about the ability of your library to satisfy the interloan requests of users, and the types of books most frequently requested by library patrons.

Tabulation of results will be provided through the Office of Library Services from the data that you will send them.

## SELECTION OF THE SAMPLE

The sample should consist of all interloan requests processed by your library during a period of time of library operations. If possible, a minimum of 300 requests should be included in the sample. The period of time covered may consist of a number of weeks or months, depending on the volume of requests received.

## DATA GATHERING

Step 1:

Using a copy machine, make an adequate number of copies of Interloan Request Sample: Form 1. For a total of 300 interloan requests, about 15 copies should be made.

Step 2:

Record information from each interloan request sampled on Interloan Request Sample: Form 1. Include a sequential identifaction number for each book request.

## TRANSFER OF INFORMATION ABOUT INTERLOAN REQUESTS TO CODING SHEETS

Next, you will be transferring the information recorded on Interloan Request Sample: Form 1 to coding sheets, which will be submitted to the Office of Library Services for data processing.

Step 1: Preparation of Coding Sheets

(a) Using a copy machine, make one copy of Interloan Request Sample: Form 2. In Columns 23 and 24 of every row of that copy, record your library budget code number, which can be found on page 8 of this manual

Finally, record the name of your library in the upper left hand corner of that copy.

(b) Next, using the copy machine again, make a sufficient number of copies of that copy of Interloan Request Sample: Form 2. You will be recording information from Interloan Request Sample: Form 1 onto these copies.

Step 2: Recording Onto Coding Sheets

Following the coding guide given in "Interloan Request Sample: Coding for Form 2," copy the information from your Interloan Request Sample: Form 1 sheets onto the Interloan Request Sample: Form 2 coding sheets.

Step 3: Submission of Information

Send the completed Interloan Request Sample: Form 2 coding sheets to the Office of Library Services. They will have the information tabulated by computer and will return the results to you.

## INTERLOAN REQUEST SAMPLE: FORM 1

Name of Library:________________________

| Item No. | Call No. | Author | Title | Year of Pub. | Request Filled |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

INTERLOAN REQUEST SAMPLE: CODING FOR FORM 2

| coding sheet column(s): | code: | code values: |
|---|---|---|
| 1-3 | item number | Sequence number of sample item<br>Note: Item numbers which are less than three digits must have zeros (0's) placed in front of them. For example, item number "23" would be recorded as "023" |
| 5 | book type | 1 = Adult fiction*<br>2 = Adult non-fiction<br>3 = Biography<br>4 = Juvenile fiction<br>5 = Juvenile non-fiction<br>6 = Hawaii & Pacific<br>7 = Foreign<br>8 = Not determined<br>*Includes mysteries, science fiction, and westerns |
| 6-7 | Dewey Decimal class | First two digits of Dewey Decimal number<br>Note: Record only for books that have a Dewey Decimal number |
| 9-10 | year of publication code | Last two digits of year of publication<br>For example, if the year of publication is 1972, the two digit code would be "72." If the book was published prior to 1901, use "01" as the code. If year not determined or no date, code as "99" |

## INTERLOAN REQUEST SAMPLE: CODING FOR FORM 2 (CONTINUED)

| coding sheet column(s): | code: | code values: |
|---|---|---|
| 12 | request filled code | 1 = interloan request filled<br>2 = interloan request not filled<br>3 = interloan request status not determined |
| 23-24 | library code | Code number for your library. See page 8 of this manual. |

## INTERLOAN REQUEST SAMPLE: FORM 2

Name of Library: ___________________________

| item number | | | | book type | Dewey Decimal class (1st 2 digits) | | | year of publication | | | request filled | | | | | | | | | | | library code | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

# SECTION 10:

# INFORMATION REQUESTS SAMPLE

The "Information Requests Sample" will provide information about the types and numbers of questions directed to staff members of your library by patrons.

The information about requests that you record will be sent to the Office of Library Services. They will return tabulated results to you.

## DATA GATHERING

### Step 1: Preparation of Forms

Using a copy machine, make a sufficient number of copies of Information Requests Sample: Form 1:

(a) Each area or department within your library that deals with questions from patrons will require copies.

(b) The monitoring of information requests should be conducted over the period of a full week of library operations. Each department involved in the monitoring will need a generous supply of forms for each day of the period.

### Step 2: Orientation of Staff

This measure must be made by staff whose primary duty, while recording the data, is service to the public. Therefore, staff involved in this measure will need time to study the definitions, try a test run on completing the forms and ask questions before the study gets underway.

At least several days before the study begins, distribute copies of "Codes to be Used for Information Requests Sample" and Patterns of Information Requests: Form 1 to all staff who will be answering questions asked by patrons on the day studied. They should read the instructions carefully and try to use the data collection form for a few hours in order to see if the instructions are clear. Meet with all these people individually or in a group in order to discuss any questions they might have. If the instructions are not sufficiently clear, decide which interpretation of them is most meaningful to your library. Please record these decisions and make sure that all those who use the form are aware of them. Be sure to keep these decisions in mind while interpreting the data.

Step 3:

Make and distribute copies of "Codes to be Used for Information Requests Sample" to each department.

On each day that the library is being monitored, distribute copies of Information Requests Sample: Form 1 to the reference staff as well as to staff in other departments and/or areas of the library who are likely to be dealing with questions from patrons, e.g., Adult Services Department, Audio/Visual Department, Childrens' Room, Circulation Desk, Information Desk.

(a) During the monitored day, check with each department, area or branch to deal with any problems that might arise during the data collection.

## TRANSFER OF SAMPLE INFORMATION TO CODING SHEETS

After the end of the monitoring period, you will be gathering completed Information Requests Sample: Form 1 sheets together and transferring the data you have collected to coding sheets, which will be submitted to the Office of Library Services for data processing.

### Step 1: Preparation of Coding Sheets

(a) Using a copy machine, make one copy of Information Requests Sample: Form 2. In Columns 23 and 24 of every row of that copy, record your library budget code number, which can be found on page 8 of this manual.

Finally, record the name of your library in the upper left hand corner of that copy.

(b) Next, using the copy machine again, make a sufficient number of copies of that copy of Information Requests Sample: Form 2. You will be recording information from Information Requests Sample: Form 1 onto these copies.

### Step 2: Recording Onto Coding Sheets

Following the coding guide given in "Information Requests Sample: Coding for Form 2," copy the information from your Information Requests Sample: Form 1 sheets onto the Information Requests Sample: Form 2 coding sheets.

Step 3: Submission of Information

Send the completed Information Requests Sample: Form 2 coding sheets to the Office of Library Services. They will have the information tabulated by computer and will return the results to you.

## INFORMATION REQUESTS SAMPLE: FORM 1

Name of Library: ____________________

Department: ____________________

Date: ____/____/____

No. of Survey Days ________

| Hour | Question Posed | | | Questioner | | | | | | | Type of Information Desired | | | | Source Used to Answer | | | | | | | | | | | Referred to | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | In Person | Telephone | Mail | Personal Use | Business | Federal | State | County | Other Library | Student | Directional | Bibliographical | Topical | Factual | Card Catalogue | Reference Collection | Circulating Collection | Periodical Index | Periodical | Vertical File | Other Source | Central Library | Other Library | Other Agency | Not Answered | Other Library | Other Department | Other Agency |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

## CODES TO BE USED FOR INFORMATION REQUESTS SAMPLE

(1) Each horizontal row on Information Requests Sample: Form 1 represents one question. You are to record all questions asked. Whether the question was answered or not is immaterial.

(2) For each question, record the hour in which it was asked. For example, a question posed at 3:50 would be recorded as 3.

(3) Put a checkmark in the appropriate box for each of the categories.

(a) "Question Posed" category
in person
telephone
mail

(b) "Questioner" category
Adults (above high school):

personal use
business
Federal (government) use
State (government) use
County (government) use
other library
student

(c) "Type of Information Desired"

"Directional" - location of materials or facilities within the library, hours, library policies, etc.

"Bibliographical" - specific author or title verification request.

"Topical" - request for material on a specific subject

"Factual" - request for specific information other than "directional"

(d) "Sources Used to Answer" questions. Most of these categories are self-explanatory.

"Other source" - other types of library materials

"Central library" - to be used by branch only

"Other library" - any library but central

"Referred to" - means the questioner must contact that source for information.

(4) You may check more than one category under "Sources Used to Answer."

## INFORMATION REQUESTS SAMPLE: CODING FOR FORM 2

| coding sheet column(s): | code: | code values: |
|---|---|---|
| 1-4 | row number | Sequence number of row on coding sheet<br>Explanation: This merely provides a sequential identification number for each row on your coding sheet<br>Note: Row numbers which are less than four digits must have zeros (0's) placed in front of them. For example, row number "23" would be recorded as "0023" |
| 6-7 | code for library department or location receiving the questions | Explanation: Prior to the survey, assign each department or area of your library handling information requests a two digit code number. Record the relevant two digit code number in columns 6-7 of each row on your coding sheet |
| 8 | question count | Record a "1" in column 8 for each separate question<br>Explanation: This will make it possible to tally the total number of questions asked. There will be more rows than questions, since some questions required more than one source to answer, and each source used to answer must be recorded on a separate row |
| 9 | day of week code | 1 = Monday<br>2 = Tuesday<br>3 = Wednesday<br>4 = Thursday<br>5 = Friday<br>6 = Saturday<br>7 = Sunday<br>Note: Record only once for each separate question (record only when there is a "1" in column 8 of the row) |

# INFORMATION REQUESTS SAMPLE: CODING FOR FORM 2 (CONTINUED)

| coding sheet column(s): | code: | code values: |
|---|---|---|
| 10-11 | code for the time when the question was asked | 01 = 8:00-8:59 AM<br>02 = 9:00-9:59 AM<br>03 = 10:00-10:59 AM<br>04 = 11:00-11:59 AM<br>05 = 12:00-12:59 PM<br>06 = 1:00-1:59 PM<br>07 = 2:00-2:59 PM<br>08 = 3:00-3:59 PM<br>09 = 4:00-4:59 PM<br>10 = 5:00-5:59 PM<br>11 = 6:00-6:59 PM<br>12 = 7:00-7:59 PM<br>13 = 8:00-8:59 PM<br>Note: Record only once for each separate question (record only when there is a "1" in column 8 of the row) |
| 12 | form of inquiry code | 1 = in person<br>2 = telephone<br>3 = mail<br>Note: Record only once for each separate question (record only when there is a "1" in column 8 of the row) |
| 13 | code for type of user | 1 = personal use<br>2 = business<br>3 = Federal<br>4 = State<br>5 = City & County<br>6 = other library<br>7 = student<br>Note: Record only once for each separate question (record only when there is a "1" in column 8 of the row) |

INFORMATION REQUESTS SAMPLE: CODING FOR FORM 2 (CONTINUED)

| coding sheet column(s): | code: | code values: |
|---|---|---|
| 14-15 | code for source used to answer | 01 = card catalogue<br>02 = reference collection<br>03 = circulating collection<br>04 = periodical index<br>05 = periodical<br>06 = vertical file<br>07 = other source<br>08 = central library<br>09 = other library<br>10 = other agency<br>11 = not answered<br>Important: If more than one source was used to answer the question, record codes for additional sources used in columns 13-14 of subsequent rows on the coding sheet. Rows containing codes for subsequent sources used to answer should be blank except for row number and columns 13-14. |
| 16 | referral code | 1 = other library<br>2 = other department<br>3 = other agency<br>Note: Record only once for each separate question (record only when there is a "1" in column   of the row) |
| 23-24 | library code | Code number for your library. See page 8 of this manual |

Sheet no.:____

Name of Library:________________________ Number of days sampled: ____

| row number | | | | | library department | | question count | day of week | time of day | | form of inquiry | type of user | source used to answer | | referral | | | | | | | library code | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

# SECTION 11:

# LIBRARY STAFF WORK SAMPLE

The staff activity measurements will provide information relative to the public service staff such as:

- how staff of the library spend their time;
- what their major activities are;
- to what extent work is being performed by professional staff that could be performed by technical and clerical personnel;
- whether there are undue delays or time spent away from the work place.

The approach to obtaining these data involves an objective statistical sampling of staff activities that take place within the library. This method is unobtrusive and should not interfere with the work of the staff. However, because of its technical nature, we recommend that a consultant familiar with work sampling be hired to design and supervise the sampling process. This measurement should be conducted once every four years. This section provides only a general overview of the measurement process; detailed forms and procedures will be supplied by the consultant.[1]

## PREPARATION FOR DATE COLLECTION

The success and accuracy of the data derived from the work sampling process depend to a large degree (1) on the definition of the work elements to be sampled, (2) on the number of observations to be made, and (3) on the strict adherence to sound sampling techniques.

The library staff work can be defined in broad terms or broken down into elemental activities depending on the use which will be made of the data. Broad categories which are useful are: [2]

1) Collection Development

2) Collection Organization

3) Collection Preparation and Maintenance

4) Collection Storage and Return

5) Circulation Activities

---

[1] A description of the work sample methodology used as a part of this library study is contained in a companion report: Volume IV: Results of Measurements Conducted in Selected Public Libraries in Hawaii.

[2] Based on 1615 tasks performed by 116 individuals in 18 libraries as reported by Mike Ricking and Robert Booth in Personnel Utilizations in Libraries - A System Approach, Chicago, 1974, in cooperation with the Illinois State Libraries and published by the American Library Association.

6) Collection Interpretation and Use

7) Management

8) Staff Development

9) Other

10) Personal Time and Delays

A more detailed breakdown of work elements is useful for such purposes as separating the work which requires professional librarians from that work which can be performed satisfactorily by clerical and technical library employees. Such a list of fifty work elements is featured in a companion volume of this library study.[3] Special work elements may be included in the work sampling program as well. Examples of such additional elements are presented elsewhere in this library study's report.[4]

Another important area of decision making prior to data gathering is the definition of the work units and functional areas to be studied. Too much detail increases the analysis required, while too little detail makes the data meaningless.

Separate forms are needed for each work unit and functional area included in the study. The work elements for each location should be listed down the left hand side of the page with the names and classification of the staff shown at the heads of the columns across the top of the form. Space should be allocated on the form to identify the time and place observed, and the name of the observer.

## DATA GATHERING

The samples can be stratified, or the samples can be collected based on the random selection of times. Observations at fixed intervals with a randomly selected starting time each day are more productive, when taken by independent observers, than randomly selected times throughout the day.

The activity of the persons observed should be noted and recorded based on an established point in time, such as when the observer first enters the area or when the observer passes a certain benchmark. Because all persons should be accounted for with each observation round, a procedure is needed to report the activity of a person who is absent from his or her designated area when the observation round is made.

---

[3] Table 29, in Volume IV: Results of Measurements Conducted in Selected Public Libraries in Hawaii.

[4] Table 30, in Ibid.

If the observer does not know what the person observed is doing, the person observed should be asked for that information. However, selection of a person familiar with library work to be the independent observer is desirable to avoid any more conversation than absolutely necessary between the observer and the persons observed. To further define the nature of the work being performed by the staff, a letter may be used in place of a check mark in the form to indicate such activities as:

A - Available to the public;

P - Working or talking with a patron.

## DATA SUMMARY AND ANALYSIS

The data are first summarized for each work unit or functional area from the data collected from each observation round. It may be useful to summarize this information by day of the week, and by time of day. However, this is meaningful only if the number of observations taken is sufficient to provide large enough samples for these breakdowns.

Finally, the data are summarized for the total period of the study by work area and functional activity, and analyzed accordingly.